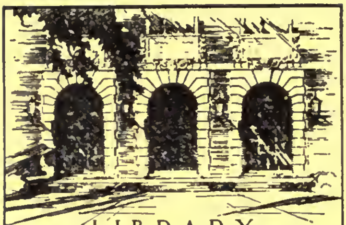
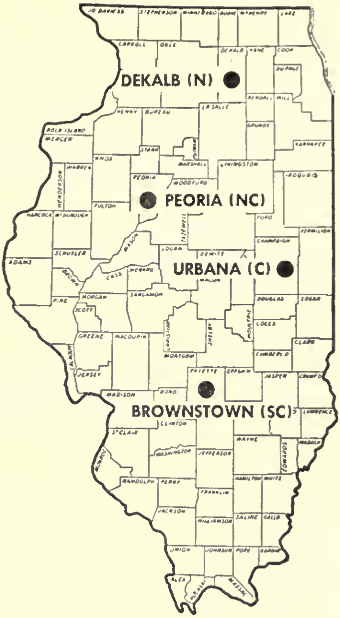


# *Experimental* CORN HYBRIDS 1954 TESTS

By R. W. Jugenheimer

Bulletin 584 · UNIVERSITY OF ILLINOIS
AGRICULTURAL EXPERIMENT STATION

Location of regular experimental-hybrid test fields

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*Acknowledgment is due W. T. Schwenk and Sons, Edwards, for providing land for one of the tests, and to Dr. W. C. Jacob, Professor of Agronomy, for valuable computational and statistical assistance.*

Urbana, Illinois — January, 1955

Publications in the Bulletin series report the results of investigations made or sponsored by the Experiment Station

# EXPERIMENTAL CORN HYBRIDS: 1954 TESTS

By R. W. Jugenheimer, Professor of Plant Genetics and Corn Research Coordinator

THIS REPORT summarizes the results of tests of experimental corn hybrids conducted in 1954 by this Station. Trials were made at four locations: in DeKalb county in northern Illinois, in Peoria county in north-central Illinois, in Champaign county in central Illinois, and in Fayette county in south-central Illinois. These four locations are representative of the soil, rainfall, and length of growing season in their respective areas.

Hybrids were compared for yield, maturity, resistance to lodging, and other agronomic characters. Only hybrids of similar maturity were tested on the same field. A familiar hybrid whose maturity was considered the standard for the group is named in each table heading.

Since most of the hybrids whose performance is recorded here are not yet in commercial use, the information about them is of most value to producers of hybrid seed. The 1954 performance of hybrids available in commercial quantities to farmers is reported in Bulletin 585 of this Station.

## MATERIAL TESTED

One hundred forty-seven different double-cross hybrids were grown at the four locations. Most of the Illinois hybrids were developed by the author. The seed was produced by controlled hand-pollination.

Two sets of single crosses and four sets of three-way crosses differing in maturity were tested in 1954. One set of single crosses (Table 3) and all sets of three-way crosses (Tables 5, 8, 9, and 11) are a part of the "uniform" tests conducted cooperatively by corn-belt states, including Illinois, and the U. S. Department of Agriculture. Seed of the unreleased inbred lines involved in these crosses was contributed by the state or by the federal corn breeder who developed them. Single crosses whose performance

is reported in Table 7 were developed by the Illinois Station and tested only in Illinois.

The following individuals are responsible at the present time for collecting seed of inbred lines, making the crosses, and distributing crossed seed of the entries in the uniform tests: E. C. Rossman (Michigan), N. P. Neal (Wisconsin), and G. H. Stringfield (Ohio) — Table 3; J. H. Lonnquist (Nebraska), R. W. Jugenheimer (Illinois), and G. F. Sprague (Iowa) — Tables 5 and 8; M. T. Jenkins (U. S. Department of Agriculture), A. M. Brunson (Indiana), and A. J. Ullstrup (Indiana) — Table 9; L. A. Tatum (Kansas), W. R. Findley (U. S. Department of Agriculture), and M. S. Zuber (Missouri) — Table 11.

The University of Illinois does not produce hybrid seed corn in commercial quantities. If a hybrid gives satisfactory performance, the parental lines are released for use by seedsmen. Hybrids that include new inbred lines are produced under the "delayed release" program adopted by most of the states in the corn belt. Multiplication of a new line is handled by the Station, and the production of single crosses in quantity is handled by the Illinois Seed Producers Association, Champaign, Illinois. After a satisfactory probationary period of two to five years, a new line is released to the public.

Table 12 (see pages 29 to 32) lists the double-cross hybrids whose performance is shown in this report and the tables in which each appears. It also contains the pedigrees of the hybrids tested. In the pedigrees, the order of the single crosses and of the lines in the single crosses has no significance; it does not indicate which should be used as seed or pollen parent in the production of a hybrid.

Illinois yellow hybrids are numbered consecutively below 2000 and above 6000. White hybrids are numbered in the 2000 series; these are usually followed by the letter *W*. Hybrids that have performed well after wide testing in several corn-belt states have been designated AES (Agricultural Experiment Station) hybrids. Hybrids in the 600 series are similar to Illinois 1277 in maturity; those in the 700 series correspond in maturity to Illinois 21; those in the 800 series correspond to U. S. 13; and hybrids in the 900 series to Illinois 448.

The letter *A* or *B* following an Illinois hybrid number indi-

cates that the combination of inbred lines making up the hybrid has been rearranged or permuted. For example, if the original pedigree of an Illinois hybrid was (1 × 2) (3 × 4), the letter *A* following the number means that the hybrid was put together (1 × 3) (2 × 4), the letter *B*, (1 × 4) (2 × 3). A difference in reciprocals is not recognized in this method. When a short dash (–) followed by a number occurs as part of an Illinois hybrid number, it means that a tested related line has been substituted for one of the inbred lines included in the original hybrid.

Performance of three-way and single-cross hybrids is of interest to corn breeders, producers of hybrid seed corn, and to farmers. Characteristics of single crosses such as yield, standability, seed size, shape, and quality definitely affect the practical production of hybrid seed corn. Some farmers are interested in growing single-cross and three-way-cross hybrids commercially because of their attractive appearance and extreme uniformity. Use of single-cross and three-way-cross data for the prediction of desirable double-cross combinations creates additional interest in the performance of single crosses.

Prediction studies are an extremely valuable part of a research program. Methods are available to predict the performance of the better hybrid combinations without making and testing large numbers of undesirable crosses. For example, 1,225 single crosses and 690,900 double crosses are possible with 50 inbred lines. However, by using single-cross performance data, the corn breeder can predict which of the many possible double-cross combinations are likely to be most desirable. The following six single crosses can be made with four inbred lines: A × B, A × C, A × D, B × C, B × D, and C × D. The average performance of the four non-parental single crosses gives the predicted performance of a specific double-cross hybrid. For instance, the average yields of the four single crosses A × C, A × D, B × C, and B × D give the predicted yield of double cross (A × B) (C × D). The procedure in predicting acre yields of two hybrids is shown on page 78 of Illinois Agricultural Experiment Station Bulletin 543.

Similar predictions can be made for other characteristics. Predicted hybrid combinations, however, should always be thoroughly tested under field conditions before being put into commercial production.

Three-way crosses also provide useful predictions of the performance of double-cross hybrids. A large number of inbred lines can be compared, and the method is especially valuable where a desirable seed parent single cross is available for use as a tester. Three-way crosses provide information on specific hybrids and may often eliminate the time and expense required for testing inbred lines in top crosses and single crosses.

The procedure in predicting acre yields and percentage of erect plants from three-way-cross data is shown below. The three-way-cross data are taken from Table 5. One hybrid is much more promising than the other hybrid.

**(Oh28xOh43)(B38xWF9)**

| | *Bushels per acre* | *Percent of erect plants* |
|---|---|---|
| (Oh28×Oh43)×B38 | 119 | 93 |
| (Oh28×Oh43)×WF9 | 106 | 92 |
| | 2 \| 225 | 2 \| 185 |
| Prediction | 112.5 | 92.5 |

**(Oh28xOh43)(N9206xOh5)**

| | *Bushels per acre* | *Percent of erect plants* |
|---|---|---|
| (Oh28×Oh43)×N9206 | 99 | 58 |
| (Oh28×Oh43)×Oh5 | 96 | 77 |
| | 2 \| 195 | 2 \| 135 |
| Prediction | 97.5 | 67.5 |

## MEASURING PERFORMANCE

All plots in these tests were planted, thinned, and harvested by hand in well-fertilized fields prepared in the usual way for corn. Individual plots were 2 x 5 hills in area. Six kernels were planted in hills spaced 40 inches apart. The plots were thinned to four plants per hill at DeKalb, Peoria, and Champaign, and to three per hill at Brownstown.

General information including dates of planting and harvesting is given in Table 1. Lattice-square designs were used to ob-

**Table 1. — GENERAL INFORMATION: Tests of Illinois Experimental Corn Hybrids, 1954**

| County[a] | Section of state | Number of replications | Number of hills per plot | Plants per hill | Date of— Planting | Date of— Harvesting |
|---|---|---|---|---|---|---|
| DeKalb....... | Northern | 4 | 10 | 4 | May 13 | Oct. 19 |
| Peoria........ | North-Central | 4 | 10 | 4 | May 17 | Oct. 14 |
| Champaign.... | Central | 4 | 10 | 4 | May 11 | Nov. 4 |
| Fayette....... | South-Central | 4 | 10 | 3 | May 18 | Nov. 9 |

[a] The fields are located near the following cities and towns: in DeKalb county near DeKalb, in Peoria county near Peoria, in Champaign county near Urbana, and in Fayette county near Brownstown.

tain the data reported in Tables 2, 3, 4, 6, 7, and 10. The data in Tables 5, 8, 9, and 11 were obtained in randomized blocks. Four replications were grown of each entry.

## RESULTS OF THE TESTS

Data obtained from the tests are summarized in Tables 2 to 11. Long-time averages are more reliable indexes of the performance of hybrids than a single year's result. The parts of the tables summarizing the results of two or more years therefore deserve the most weight when the results are studied.

Hybrids are listed in the tables in the order of their yield. Acre yields are reported as shelled grain containing 15.5 percent moisture, the maximum allowable for No. 2 corn. The crop from one replication of each entry at each location was shelled to determine the shelling percentage and moisture percentage. The percentage of moisture in the shelled grain was obtained with a Steinlite moisture meter. Erect plants at harvest and stand were determined from actual counts on all replications of each test.

Data from all plots are included in the report on yield. The only correction for imperfect stands was the following adjustment for missing hills:

$$\text{Corrected weight} = \text{Field weight} \times \frac{\left(\text{Number of hills per plot}\right) - \left(0.3 \times \text{Number of missing hills per plot}\right)}{\left(\text{Number of hills per plot}\right) - \left(\text{Number of missing hills per plot}\right)}$$

This adjustment adds 0.7 percent of the average hill yield for each missing hill, and assumes that 0.3 percent is made up by the increased yield of surrounding hills.

Relative performance cannot be determined with absolute accuracy by any method of testing. Small differences between entries are seldom of any significance. In fact, small differences are to be expected among plots planted even with the same lot of seed. Variations in growing conditions such as soil fertility are reduced but not completely eliminated by replicating the same entry several times in the same test. Unavoidable variation may be determined by a mathematical procedure known as analysis of variance. From this procedure a figure may be obtained that represents the number of bushels by which two entries must differ in yielding ability before they can be considered

significantly different. Note, for example, in Table 2E that unless any two entries differ by at least 10 bushels per acre there is no statistical difference between them in yielding ability.

The season was favorable for corn at DeKalb and Peoria. The growing season at Urbana was hot and dry, with resulting low yields. Yields were unusually low at Brownstown because of the extremely hot and dry growing season.

The following double crosses were average or better in yield and standability, and average or earlier in maturity as measured by the percent of moisture in the grain. The hybrids are arranged in order of yield.

*Northern Illinois*

Five-year average (Table 2A) — Ill. 1289, Ill. 1555A, Ill. 1559B, Ill. 1557, Ill. 1560A.

Four-year average (Table 2B) — Ill. 1289, AES 702, Ill. 1555A, Ill. 1557, Ill. 1558, Ill. 1559B, Ill. 1279.

Three-year average (Table 2C) — Ill. 1277, Ill. 1279, Ill. 1555A.

Two-year average (Table 2D) — Ill. 1289, Ill. 1555A, Ill. 1279.

1954 results (Table 2E) — Ill. 21, Ill. 1555A, AES 702, Ill. 1289, Ill. 2247W, Ill. 1279, Ill. 101, Ill. 1864, Ill. 1560A.

*North–Central Illinois*

Five-year average (Table 4A) — Ill. 1555A, Ill. 1560A.

Four-year average (Table 4B) — Ill. 274-1, Ill. 1575, Ill. 1555A.

Three-year average (Table 4C) — Ill. 274-1, Ill. 1575, Ill. 1555A, Ill. 1277.

Two-year average (Table 4D) — Ill. 1332, Ill. 274-1, Ill. 1511, Ill. 1555A, Ill. 1575.

1954 results (Table 4E) — Ill. 1511, Ill. 1332, Ill. 1919, Ill. 1617, Ill. 1905, Ill. 274-1, Ill. 1875, Ill. 1914, Ill. 1555A, Ill. 1896A.

*Central Illinois*

Five-year average (Table 6A) — Ill. 1332, Ill. 972A-1.

Four-year average (Table 6B) — Ill. 1511, Ill. 1421, Ill. 1332, Ill. 972A-1, Ill. 1777.

Three-year average (Table 6C) — Ill. 1332, AES 801, Ill. 972A-1, AES 802.

Two-year average (Table 6D) — Ill. 1332, AES 802, AES 801, Ill. 21, Ohio 4808.

1954 results (Table 6E) — Ill. 1896, Ill. 1913, Ill. 1919, Ill. 1911, Ill. 1777, Ill. 1332, Ill. 1908, Ill. 1915, Ill. 1909, AES 801, Ill. 21.

*South–Central Illinois*

Five-year average (Table 10A) — Ill. 1539A, Ill. 1349, Ill. 1332.

Four-year average (Table 10B) — Ill. 1332, Ill. 1656, Ill. 1349, Ill. 1539A.

Three-year average (Table 10C) — Ill. 1656, Ill. 1332, Ill. 1349.

Two-year average (Table 10D) — Ill. 1859, Ill. 2246W, Ill. 1332, Ill. 1656, Ill. 6076, AES 803, Ill. 1349, Ill. 1893.

1954 results (Table 10E) — Ill. 1656, Ill. 1332, Ill. 1859, Ill. 1539A, Ill. 1856, Ill. 1852, Ill. 2246W, Ill. 1349, Ill. 1893, Mo. 804, Ill. 1771, AES 805, Ill. 1914, Ill. 1896.

## Table 2. — DOUBLE CROSSES OF ILLINOIS 1277 MATURITY
### Tested in Northern Illinois, 1950-1954

(Entries in **boldface** were average or better in yield and standability and average or earlier in maturity)

| Rank in yield | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height |
|---|---|---|---|---|---|---|---|
| | **A — Five-year averages, 1950-1954** | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* |
| 1 | **Ill. 1289** | 101 | 24 | 78 | 96 | 98 | 36 |
| 2 | Ill. 1277 | 99 | 24 | 78 | 94 | 98 | 39 |
| 3 | Ill. 1575 | 99 | 26 | 78 | 97 | 99 | 39 |
| 4 | **Ill. 1555A** | 98 | 21 | 80 | 96 | 97 | 38 |
| 5 | **Ill. 1559B** | 98 | 23 | 78 | 98 | 98 | 33 |
| 6 | **Ill. 1557** | 98 | 24 | 76 | 98 | 96 | 35 |
| 7 | **Ill. 1560A** | 97 | 23 | 79 | 100 | 98 | 36 |
| 8 | Ill. 1279 | 97 | 24 | 78 | 95 | 98 | 39 |
| 9 | Ill. 1280 | 97 | 24 | 78 | 95 | 97 | 37 |
| 10 | Ill. 1290 | 97 | 25 | 78 | 95 | 95 | 39 |
| 11 | Ill. 1091A | 96 | 26 | 77 | 96 | 98 | 40 |
| 12 | Ill. 1558 | 95 | 26 | 76 | 98 | 97 | 34 |
| 13 | Ill. 101 | 94 | 24 | 77 | 97 | 97 | 37 |
| 14 | Ill. 21 | 94 | 27 | 76 | 94 | 98 | 46 |
| 15 | Ill. 1375 | 92 | 23 | 78 | 96 | 98 | 35 |
| 16 | Ill. 1595 | 92 | 24 | 77 | 97 | 98 | 41 |
| | Average | 96 | 24 | 78 | 96 | 98 | 38 |
| | **B — Four-year averages, 1951-1954** | | | | | | |
| 1 | Ill. 1493 | 109 | 26 | 79 | 98 | 97 | 40 |
| 2 | **Ill. 1289** | 108 | 24 | 78 | 96 | 97 | 36 |
| 3 | Ill. 1575 | 108 | 27 | 77 | 97 | 98 | 40 |
| 4 | Ill. 1277 | 107 | 24 | 78 | 95 | 97 | 40 |
| 5 | **AES 702** | 107 | 24 | 75 | 96 | 99 | 42 |
| 6 | **Ill. 1555A** | 106 | 22 | 80 | 96 | 98 | 41 |
| 7 | Ill. 1280 | 106 | 24 | 78 | 95 | 97 | 38 |
| 8 | **Ill. 1557** | 106 | 24 | 76 | 98 | 96 | 36 |
| 9 | Ill. 21 | 106 | 26 | 76 | 94 | 97 | 48 |
| 10 | **Ill. 1558** | 105 | 25 | 77 | 98 | 97 | 36 |
| 11 | **Ill. 1559B** | 104 | 24 | 78 | 98 | 98 | 35 |
| 12 | **Ill. 1279** | 104 | 25 | 78 | 96 | 98 | 39 |
| 13 | Ill. 1290 | 104 | 25 | 78 | 94 | 96 | 39 |
| 14 | Ill. 101 | 104 | 26 | 78 | 97 | 98 | 38 |
| 15 | Ill. 1560A | 103 | 24 | 78 | 100 | 98 | 37 |
| 16 | Ill. 1091A | 103 | 27 | 77 | 95 | 97 | 40 |
| 17 | Ill. 1281 | 102 | 26 | 78 | 96 | 97 | 36 |
| 18 | Ill. 1585 | 101 | 24 | 77 | 94 | 94 | 37 |
| 19 | Ohio K24 | 100 | 22 | 80 | 95 | 95 | 37 |
| 20 | Ill. 1579 | 100 | 24 | 79 | 97 | 98 | 34 |
| 21 | Ill. 1595 | 99 | 25 | 77 | 97 | 97 | 42 |
| 22 | Ill. 1375 | 98 | 24 | 78 | 96 | 98 | 34 |
| | Average | 104 | 25 | 78 | 96 | 97 | 38 |

(Table is continued on next page)

Table 2. — Continued

| Rank in yield | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height |
|---|---|---|---|---|---|---|---|
| | **C — Three-year averages, 1952-1954** | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* |
| 1 | Ill. 21 | 120 | 22 | 79 | 95 | 97 | 47 |
| 2 | Ill. 1575 | 120 | 23 | 79 | 99 | 98 | 40 |
| 3 | Ill. 1277 | 119 | 21 | 79 | 96 | 97 | 39 |
| 4 | AES 702 | 119 | 23 | 77 | 97 | 98 | 41 |
| 5 | Ill. 1493 | 118 | 23 | 77 | 98 | 97 | 38 |
| 6 | Ill. 1289 | 118 | 25 | 78 | 96 | 97 | 37 |
| 7 | Ill. 1279 | 117 | 20 | 79 | 96 | 98 | 38 |
| 8 | Ill. 1280 | 117 | 21 | 80 | 95 | 95 | 38 |
| 9 | Ill. 101 | 117 | 22 | 80 | 97 | 99 | 37 |
| 10 | I.S.P. 2 | 117 | 24 | 76 | 99 | 99 | 37 |
| 11 | Ill. 1557 | 116 | 23 | 78 | 98 | 96 | 37 |
| 12 | Ill. 1559B | 115 | 22 | 80 | 98 | 98 | 36 |
| 13 | Ill. 1558 | 115 | 22 | 78 | 98 | 96 | 36 |
| 14 | Ill. 1091A | 115 | 23 | 78 | 95 | 96 | 41 |
| 15 | Ill. 1555A | 114 | 20 | 81 | 97 | 97 | 41 |
| 16 | Ill. 1290 | 114 | 22 | 79 | 95 | 95 | 38 |
| 17 | Ill. 1281 | 113 | 22 | 78 | 97 | 97 | 37 |
| 18 | Ill. 1560A | 112 | 21 | 78 | 99 | 97 | 37 |
| 19 | Ill. 1585 | 111 | 21 | 78 | 93 | 94 | 37 |
| 20 | Ind. 0421 | 109 | 19 | 81 | 97 | 99 | 37 |
| 21 | Ill. 1579 | 109 | 20 | 79 | 96 | 96 | 34 |
| 22 | Ill. 1595 | 109 | 21 | 77 | 98 | 98 | 41 |
| 23 | Ohio K24 | 108 | 20 | 80 | 97 | 95 | 36 |
| 24 | Ill. 1800 | 108 | 21 | 79 | 97 | 97 | 36 |
| 25 | Ill. 1799 | 107 | 19 | 81 | 98 | 100 | 38 |
| 26 | Ill. 1802 | 107 | 20 | 80 | 98 | 96 | 38 |
| 27 | Ill. 1375 | 107 | 20 | 80 | 96 | 97 | 35 |
| 28 | AES 610 | 105 | 20 | 80 | 93 | 96 | 31 |
| 29 | Ohio M15 | 101 | 19 | 82 | 91 | 96 | 42 |
| | Average | 113 | 21 | 79 | 96 | 97 | 38 |
| | **D — Two-year averages, 1953-1954** | | | | | | |
| 1 | Ill. 1902 | 132 | 22 | 79 | 92 | 100 | 40 |
| 2 | Ill. 1575 | 126 | 23 | 80 | 98 | 98 | 40 |
| 3 | Ill. 21 | 124 | 21 | 79 | 94 | 96 | 46 |
| 4 | Ill. 1277 | 124 | 22 | 80 | 95 | 96 | 39 |
| 5 | Ill. 1493 | 124 | 23 | 79 | 98 | 96 | 38 |
| 6 | Ill. 1861 | 123 | 20 | 82 | 94 | 98 | 37 |
| 7 | Ill. 1559B | 123 | 22 | 81 | 97 | 99 | 36 |
| 8 | Ill. 1289 | 122 | 21 | 79 | 96 | 97 | 36 |
| 9 | Ill. 101 | 122 | 22 | 81 | 96 | 98 | 36 |
| 10 | Ill. 1863 | 122 | 23 | 80 | 96 | 98 | 34 |
| 11 | Ill. 1557 | 122 | 23 | 79 | 96 | 96 | 36 |
| 12 | Ill. 1555A | 120 | 20 | 82 | 96 | 96 | 40 |
| 13 | Ill. 1279 | 120 | 20 | 80 | 95 | 98 | 37 |
| 14 | Ill. 1281 | 120 | 22 | 80 | 96 | 96 | 36 |
| 15 | Ill. 1091A | 120 | 22 | 78 | 93 | 96 | 40 |
| 16 | AES 702 | 120 | 22 | 77 | 96 | 98 | 40 |
| 17 | Ill. 1865 | 118 | 22 | 80 | 96 | 96 | 34 |
| 18 | Ill. 1866 | 118 | 22 | 80 | 94 | 97 | 36 |
| 19 | Ill. 1280 | 118 | 22 | 80 | 93 | 96 | 37 |
| 20 | Ill. 1585 | 117 | 21 | 80 | 90 | 97 | 36 |
| 21 | I.S.P. 2 | 117 | 24 | 77 | 98 | 99 | 36 |
| 22 | Ind. 0421 | 116 | 20 | 82 | 96 | 98 | 37 |
| 23 | Ill. 1560A | 116 | 20 | 79 | 99 | 96 | 36 |
| 24 | Ill. 1290 | 116 | 22 | 80 | 94 | 94 | 38 |
| 25 | Ill. 1558 | 116 | 22 | 78 | 97 | 96 | 34 |
| 26 | Ill. 1864 | 115 | 20 | 82 | 96 | 98 | 32 |
| 27 | Ill. 1375 | 114 | 20 | 81 | 95 | 98 | 35 |
| 28 | Ill. 1595 | 114 | 22 | 79 | 97 | 96 | 40 |
| 29 | Ill. 6074 | 114 | 24 | 80 | 90 | 96 | 42 |
| 30 | Ill. 1862 | 113 | 21 | 80 | 96 | 94 | 31 |

(Table is concluded on next page)

Table 2. — Concluded

| Rank in yield | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height | Dropped ears |
|---|---|---|---|---|---|---|---|---|
| | **D — Two-year averages, 1953-1954 (concluded)** | | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* | *perct.* |
| 31 | Ill. 1579 | 111 | 21 | 80 | 94 | 96 | 34 | ... |
| 32 | Ill. 1799 | 110 | 19 | 82 | 96 | 99 | 38 | ... |
| 33 | Ohio K24 | 110 | 20 | 82 | 96 | 94 | 36 | ... |
| 34 | Ill. 1802 | 110 | 20 | 80 | 98 | 98 | 36 | ... |
| 35 | Ill. 1800 | 108 | 21 | 80 | 95 | 97 | 34 | ... |
| 36 | AES 610 | 106 | 20 | 82 | 90 | 95 | 32 | ... |
| 37 | Ohio M15 | 104 | 20 | 82 | 88 | 96 | 41 | ... |
| | Average | 117 | 21 | 80 | 95 | 97 | 37 | |
| | **E — 1954 results (4 replications)** | | | | | | | |
| 1 | Ill. 1902 | 149 | 27 | 78 | 90 | 100 | 41 | 0 |
| 2 | M14×WF9 | 140 | 25 | 78 | 90 | 98 | 36 | 0 |
| 3 | Ill. 1861 | 140 | 23 | 80 | 89 | 99 | 36 | 3.2 |
| 4 | Ill. 1281 | 139 | 27 | 79 | 95 | 99 | 41 | 1.2 |
| 5 | Ill. 1559B | 138 | 27 | 77 | 96 | 99 | 39 | .7 |
| 6 | Ill. 1575 | 137 | 28 | 77 | 96 | 97 | 43 | 2.0 |
| 7 | Ill. 21 | 137 | 25 | 77 | 93 | 96 | 46 | 3.4 |
| 8 | Ill. 1555A | 137 | 26 | 79 | 96 | 94 | 40 | 3.3 |
| 9 | Ill. 1493 | 137 | 28 | 78 | 97 | 92 | 41 | 0 |
| 10 | AES 702 | 136 | 26 | 77 | 95 | 99 | 39 | 3.8 |
| 11 | Ill. 1557 | 136 | 28 | 77 | 94 | 98 | 38 | .6 |
| 12 | Ill. 1289 | 135 | 26 | 77 | 92 | 98 | 39 | 4.9 |
| 13 | Ill. 2247W | 134 | 25 | 78 | 93 | 94 | 42 | 3.1 |
| 14 | Ill. 1279 | 133 | 25 | 78 | 92 | 97 | 38 | 3.3 |
| 15 | Iowa 4630 | 133 | 24 | 79 | 88 | 96 | 36 | 2.6 |
| 16 | Ill. 1277 | 133 | 26 | 79 | 91 | 94 | 42 | 5.3 |
| 17 | Ill. 101 | 131 | 26 | 79 | 95 | 97 | 39 | 4.2 |
| 18 | Ill. 1866 | 129 | 27 | 78 | 90 | 94 | 38 | .7 |
| 19 | Ill. 1864 | 128 | 24 | 78 | 95 | 96 | 32 | 5.8 |
| 20 | Ill. 1091A | 128 | 27 | 77 | 90 | 97 | 42 | 2.9 |
| 21 | I.S.P. 2 | 127 | 28 | 76 | 97 | 100 | 35 | 1.4 |
| 22 | Ill. 1560A | 127 | 24 | 77 | 98 | 96 | 38 | 1.2 |
| 23 | Ill. 1290 | 127 | 27 | 78 | 88 | 94 | 39 | 2.8 |
| 24 | Ill. 1595 | 127 | 28 | 79 | 95 | 97 | 43 | .7 |
| 25 | Ill. 1903 | 126 | 24 | 77 | 97 | 96 | 40 | 2.7 |
| 26 | Ill. 1585 | 126 | 26 | 78 | 88 | 95 | 38 | 3.8 |
| 27 | Ill. 1375 | 126 | 25 | 79 | 91 | 96 | 38 | 2.6 |
| 28 | Ind. 0421 | 126 | 25 | 80 | 93 | 98 | 38 | 3.5 |
| 29 | Ill. 1280 | 125 | 26 | 79 | 87 | 94 | 37 | 3.3 |
| 30 | Ill. 1863 | 125 | 28 | 79 | 94 | 97 | 33 | 1.5 |
| 31 | AES 510 | 124 | 23 | 80 | 93 | 93 | 39 | 2.1 |
| 32 | Ill. 6015 | 123 | 32 | 75 | 83 | 95 | 62 | .6 |
| 33 | Ill. 1865 | 122 | 27 | 78 | 93 | 98 | 34 | 3.1 |
| 34 | Ill. 1579 | 122 | 25 | 78 | 90 | 96 | 35 | 1.9 |
| 35 | Ill. 6074 | 121 | 29 | 78 | 88 | 94 | 42 | 2.0 |
| 36 | Ill. 1799 | 121 | 22 | 79 | 93 | 99 | 39 | 3.1 |
| 37 | Ill. 6052 | 120 | 32 | 76 | 87 | 94 | 51 | .6 |
| 38 | Ill. 1558 | 120 | 26 | 76 | 95 | 93 | 36 | 2.2 |
| 39 | Ill. 1802 | 120 | 24 | 78 | 97 | 96 | 38 | 2.6 |
| 40 | Ill. 1862 | 119 | 25 | 79 | 92 | 88 | 30 | 1.9 |
| 41 | Ohio K24 | 119 | 23 | 80 | 94 | 93 | 37 | 3.9 |
| 42 | Minn. 40 | 119 | 23 | 78 | 92 | 94 | 38 | 0 |
| 43 | Iowa 4558 | 117 | 22 | 80 | 89 | 92 | 35 | 4.3 |
| 44 | Minn. 4 | 117 | 23 | 80 | 92 | 92 | 40 | 3.3 |
| 45 | Ill. 1800 | 117 | 26 | 78 | 90 | 96 | 35 | 2.6 |
| 46 | AES 610 | 116 | 23 | 80 | 84 | 95 | 34 | 1.4 |
| 47 | Ohio M15 | 112 | 24 | 82 | 84 | 95 | 43 | 3.9 |
| 48 | Ill. 6062 | 103 | 33 | 75 | 86 | 96 | 55 | 1.7 |
| 49 | Ohio 5305 | 97 | 22 | 78 | 96 | 91 | 38 | .8 |
| | Average | 127 | 26 | 78 | 92 | 96 | 39 | 2.4 |
| | Significant difference | 10 | .. | .. | 7 | 8 | 4 | ... |

## Table 3. — SINGLE AND DOUBLE CROSSES OF ILLINOIS 1277 MATURITY
### Tested in Northern Illinois, 1954

(Entries in boldface were average or better in yield and standability and average or earlier in maturity)

| Code | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height | Dropped ears |
|---|---|---|---|---|---|---|---|---|
| | **A — Single crosses** | | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* | *perct.* |
| 1 | M14×B14 | 149 | 25 | 81 | 97 | 94 | 38 | 0 |
| 2 | M14×B21 | 131 | 25 | 80 | 88 | 97 | 37 | 2.0 |
| 3 | M14×A223 | 114 | 23 | 79 | 85 | 97 | 34 | 1.2 |
| 4 | B14×B21 | 121 | 30 | 79 | 83 | 97 | 45 | 1.3 |
| 5 | **B14×A223** | 138 | 22 | 80 | 99 | 94 | 36 | .7 |
| 6 | B21×A223 | 126 | 23 | 79 | 97 | 90 | 37 | 1.2 |
| 7 | **A239×M14** | 134 | 24 | 81 | 98 | 97 | 39 | 0 |
| 8 | **A239×B14** | 129 | 24 | 83 | 100 | 99 | 40 | 0 |
| 9 | A239×B21 | 108 | 22 | 82 | 97 | 89 | 37 | .8 |
| 11 | A295×M14 | 119 | 25 | 77 | 93 | 98 | 36 | .6 |
| 12 | **A295×B14** | 142 | 24 | 79 | 97 | 93 | 42 | 0 |
| 13 | A295×B21 | 124 | 23 | 78 | 92 | 86 | 40 | .6 |
| 14 | A295×A223 | 107 | 21 | 77 | 94 | 98 | 38 | 8.1 |
| 15 | A295×A239 | 124 | 21 | 79 | 88 | 98 | 41 | 0 |
| 16 | A297×M14 | 122 | 22 | 80 | 96 | 97 | 40 | 0 |
| 17 | **A297×B14** | 139 | 24 | 81 | 100 | 95 | 42 | 0 |
| 18 | A297×B21 | 143 | 22 | 81 | 92 | 100 | 43 | 5.1 |
| 19 | A297×A223 | 112 | 22 | 81 | 96 | 98 | 38 | .6 |
| 20 | A297×A239 | 115 | 22 | 82 | 98 | 98 | 39 | .7 |
| 21 | A297×A295 | 115 | 22 | 79 | 93 | 96 | 41 | 3.8 |
| 22 | **A545×M14** | 136 | 24 | 81 | 95 | 96 | 38 | 0 |
| 23 | A545×B14 | 135 | 27 | 82 | 99 | 96 | 45 | 0 |
| 24 | A545×B21 | 134 | 25 | 82 | 95 | 88 | 40 | 0 |
| 25 | A545×A223 | 118 | 23 | 78 | 94 | 100 | 35 | .6 |
| 26 | A545×A239 | 139 | 24 | 81 | 93 | 96 | 42 | .6 |
| 27 | A545×A295 | 125 | 23 | 74 | 92 | 99 | 40 | .6 |
| 28 | **A545×A297** | 131 | 24 | 80 | 96 | 100 | 43 | 0 |
| 29 | Oh26A×M14 | 126 | 24 | 79 | 85 | 96 | 41 | 0 |
| 30 | Oh26A×B14 | 138 | 25 | 78 | 99 | 95 | 42 | 0 |
| 31 | Oh26A×B21 | 121 | 23 | 80 | 96 | 86 | 40 | 1.3 |
| 32 | Oh26A×A223 | 118 | 20 | 81 | 99 | 83 | 37 | 0 |
| 33 | Oh26A×A239 | 122 | 22 | 80 | 94 | 87 | 38 | 0 |
| 34 | Oh26A×A295 | 115 | 22 | 75 | 99 | 96 | 39 | 0 |
| 35 | Oh26A×A297 | 123 | 22 | 80 | 96 | 98 | 38 | 1.9 |
| 36 | Oh26A×A545 | 138 | 26 | 79 | 98 | 99 | 44 | 2.1 |
| 37 | **W64A×M14** | 135 | 23 | 78 | 96 | 98 | 33 | .6 |
| 38 | W64A×B14 | 144 | 26 | 79 | 99 | 97 | 37 | .7 |
| 39 | W64A×B21 | 115 | 22 | 78 | 90 | 83 | 35 | 1.5 |
| 40 | W64A×A223 | 126 | 23 | 78 | 98 | 96 | 35 | 3.2 |
| 41 | W64A×A239 | 120 | 22 | 78 | 97 | 98 | 36 | .7 |
| 42 | W64A×A295 | 123 | 25 | 76 | 95 | 96 | 37 | 1.9 |
| 43 | **W64A×A297** | 135 | 23 | 78 | 98 | 97 | 40 | 1.2 |
| 44 | W64A×A545 | 136 | 27 | 78 | 97 | 93 | 37 | 1.3 |
| 45 | W64A×Oh26A | 110 | 24 | 77 | 97 | 89 | 36 | 0 |
| | Average | 127 | 24 | 79 | 95 | 95 | 39 | 1.0 |
| | Significant difference | 12 | .. | .. | 6 | 12 | 3 | ... |
| | **B — Double crosses** | | | | | | | |
| | Ill. 1863 | 143 | 27 | 79 | 96 | 99 | 35 | 2.0 |
| | AES 702 | 139 | 27 | 76 | 94 | 98 | 44 | 3.2 |
| | Ill. 1289 | 134 | 28 | 78 | 99 | 98 | 38 | 1.3 |
| | Ohio K24 | 123 | 24 | 80 | 93 | 95 | 36 | 3.5 |
| | Ill. 1800 | 118 | 25 | 77 | 92 | 91 | 37 | .6 |
| | Average | 131 | 26 | 78 | 95 | 96 | 38 | 2.1 |
| | Significant difference | 12 | .. | .. | 6 | 12 | 3 | ... |

## Table 4. — DOUBLE CROSSES OF ILLINOIS 21 MATURITY Tested in North-Central Illinois, 1950-1954

(Entries in **boldface** were average or better in yield and standability and average or earlier in maturity)

| Rank in yield | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height |
|---|---|---|---|---|---|---|---|
| | **A — Five-year averages, 1950-1954** | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* |
| 1 | **Ill. 1555A** | 91 | 17 | 84 | 94 | 97 | 38 |
| 2 | **Ill. 1560A** | 90 | 18 | 81 | 97 | 98 | 37 |
| 3 | Ill. 1290 | 90 | 19 | 82 | 93 | 96 | 39 |
| 4 | Ill. 1277 | 90 | 20 | 82 | 93 | 98 | 39 |
| 5 | Ill. 1575 | 90 | 21 | 80 | 96 | 99 | 40 |
| 6 | Ill. 1280 | 89 | 19 | 82 | 91 | 97 | 37 |
| | Average | 90 | 19 | 82 | 94 | 98 | 38 |
| | **B — Four-year averages, 1951-1954** | | | | | | |
| 1 | Ill. 1511 | 104 | 20 | 83 | 92 | 89 | 48 |
| 2 | Ill. 972A-1 | 104 | 20 | 82 | 91 | 95 | 45 |
| 3 | Ill. 1617 | 103 | 20 | 79 | 91 | 96 | 44 |
| 4 | Ill. 1332 | 101 | 19 | 82 | 91 | 97 | 46 |
| 5 | Ill. 1570 | 101 | 21 | 79 | 88 | 99 | 48 |
| 6 | **Ill. 274-1** | 100 | 19 | 81 | 94 | 97 | 46 |
| 7 | **Ill. 1575** | 99 | 20 | 80 | 95 | 99 | 41 |
| 8 | **Ill. 1555A** | 97 | 17 | 84 | 93 | 98 | 40 |
| 9 | Ill. 1277 | 96 | 20 | 83 | 93 | 97 | 40 |
| 10 | AES 805 | 96 | 21 | 78 | 96 | 93 | 43 |
| 11 | Ill. 1760 | 96 | 22 | 78 | 94 | 95 | 44 |
| 12 | Ill. 1280 | 95 | 18 | 83 | 90 | 97 | 38 |
| 13 | Ill. 1290 | 94 | 18 | 82 | 92 | 94 | 39 |
| 14 | Ill. 1560A | 94 | 18 | 81 | 96 | 98 | 38 |
| 15 | AES 702 | 92 | 20 | 78 | 91 | 97 | 42 |
| 16 | Iowa 4297 | 87 | 19 | 82 | 94 | 91 | 40 |
| | Average | 97 | 20 | 81 | 93 | 96 | 43 |
| | **C — Three-year averages, 1952-1954** | | | | | | |
| 1 | Ill. 1819 | 106 | 18 | 81 | 89 | 98 | 45 |
| 2 | AES 806 | 105 | 22 | 80 | 89 | 97 | 44 |
| 3 | Ill. 1511 | 104 | 19 | 83 | 91 | 86 | 50 |
| 4 | Ill. 972A-1 | 104 | 21 | 81 | 90 | 95 | 49 |
| 5 | Ill. 1332 | 102 | 19 | 82 | 90 | 96 | 48 |
| 6 | Ill. 1570 | 102 | 20 | 79 | 86 | 98 | 50 |
| 7 | **Ill. 274-1** | 101 | 19 | 82 | 93 | 97 | 47 |
| 8 | Ill. 1617 | 101 | 19 | 79 | 89 | 92 | 45 |
| 9 | Ill. 1814 | 100 | 21 | 81 | 94 | 96 | 40 |
| 10 | **Ill. 1575** | 99 | 19 | 80 | 94 | 98 | 42 |
| 11 | Ill. 1831 | 99 | 20 | 81 | 94 | 96 | 41 |
| 12 | **Ill. 1555A** | 98 | 16 | 85 | 93 | 97 | 42 |
| 13 | **Ill. 1277** | 97 | 19 | 83 | 92 | 97 | 42 |
| 14 | Ill. 1560A | 95 | 17 | 82 | 96 | 97 | 40 |
| 15 | Ill. 1826 | 95 | 20 | 81 | 92 | 98 | 39 |
| 16 | Ill. 1760 | 95 | 21 | 78 | 92 | 94 | 44 |
| 17 | Ill. 1813 | 94 | 23 | 79 | 95 | 94 | 45 |
| 18 | Ill. 1280 | 93 | 18 | 82 | 87 | 96 | 39 |
| 19 | AES 805 | 93 | 21 | 78 | 95 | 91 | 44 |
| 20 | Ill. 1290 | 92 | 18 | 83 | 89 | 94 | 41 |
| 21 | Ind. 1405 | 91 | 19 | 80 | 95 | 92 | 38 |
| 22 | AES 702 | 89 | 20 | 78 | 89 | 97 | 43 |
| 23 | Iowa 4297 | 85 | 18 | 82 | 92 | 90 | 41 |
| | Average | 97 | 19 | 81 | 92 | 95 | 43 |

(Table is continued on next page)

## Table 4. — Continued

| Rank in yield | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height | Dropped ears |
|---|---|---|---|---|---|---|---|---|
| | **D — Two-year averages, 1953-1954** | | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* | *perct.* |
| 1 | AES 806 | 100 | 21 | 80 | 86 | 96 | 42 | ... |
| 2 | Ill. 1819 | 98 | 18 | 82 | 84 | 96 | 41 | ... |
| 3 | Ill. 1570 | 95 | 19 | 80 | 81 | 97 | 46 | ... |
| 4 | **Ill. 1332** | 94 | 18 | 83 | 89 | 94 | 45 | ... |
| 5 | Ill. 1875 | 94 | 19 | 80 | 92 | 92 | 47 | ... |
| 6 | Ill. 972A-1 | 94 | 20 | 81 | 86 | 92 | 46 | ... |
| 7 | **Ill. 274-1** | 93 | 18 | 82 | 91 | 96 | 43 | ... |
| 8 | **Ill. 1511** | 92 | 18 | 84 | 89 | 78 | 46 | ... |
| 9 | Ill. 1617 | 92 | 18 | 80 | 88 | 96 | 44 | ... |
| 10 | Ill. 1831 | 92 | 20 | 82 | 94 | 94 | 38 | ... |
| 11 | Ill. 1896A | 91 | 18 | 80 | 88 | 98 | 40 | ... |
| 12 | **Ill. 1555A** | 90 | 16 | 84 | 90 | 96 | 40 | ... |
| 13 | **Ill. 1575** | 90 | 18 | 81 | 91 | 98 | 39 | ... |
| 14 | Ill. 1814 | 90 | 19 | 82 | 92 | 97 | 38 | ... |
| 15 | Ill. 1868 | 90 | 19 | 81 | 94 | 94 | 40 | ... |
| 16 | Ill. 1277 | 89 | 18 | 84 | 88 | 96 | 38 | ... |
| 17 | Ill. 2247W | 88 | 18 | 81 | 80 | 95 | 42 | ... |
| 18 | Ill. 1560A | 87 | 16 | 82 | 94 | 96 | 36 | ... |
| 19 | Ill. 1813 | 87 | 22 | 79 | 92 | 96 | 42 | ... |
| 20 | Ill. 1826 | 86 | 19 | 82 | 90 | 98 | 36 | ... |
| 21 | Ill. 1760 | 86 | 20 | 78 | 89 | 91 | 42 | ... |
| 22 | Ill. 1280 | 84 | 16 | 82 | 82 | 95 | 35 | ... |
| 23 | Ill. 1290 | 84 | 17 | 82 | 88 | 91 | 38 | ... |
| 24 | Ind. 1405 | 84 | 18 | 82 | 93 | 93 | 35 | ... |
| 25 | Ill. 1864 | 83 | 16 | 82 | 93 | 94 | 36 | ... |
| 26 | Ill. 1863 | 82 | 18 | 82 | 94 | 95 | 36 | ... |
| 27 | Ill. 1873 | 82 | 18 | 80 | 94 | 94 | 36 | ... |
| 28 | AES 702 | 82 | 18 | 80 | 86 | 96 | 40 | ... |
| 29 | AES 805 | 82 | 20 | 78 | 93 | 87 | 42 | ... |
| 30 | Iowa 4297 | 74 | 18 | 82 | 92 | 86 | 38 | ... |
| | Average | 88 | 18 | 81 | 89 | 94 | 40 | ... |
| | **E — 1954 results (4 replications)** | | | | | | | |
| 1 | AES 806 | 107 | 23 | 80 | 88 | 100 | 40 | 1.5 |
| 2 | Ill. 972A-1 | 107 | 22 | 80 | 85 | 99 | 46 | 3.3 |
| 3 | Ill. 1912 | 107 | 21 | 81 | 79 | 97 | 42 | 3.6 |
| 4 | Ill. 1819 | 107 | 22 | 80 | 79 | 99 | 43 | 7.2 |
| 5 | **Ill. 1511** | 106 | 21 | 82 | 85 | 98 | 47 | 15.5 |
| 6 | **Ill. 1332** | 105 | 20 | 82 | 86 | 100 | 43 | 3.9 |
| 7 | Ill. 1570 | 105 | 22 | 80 | 77 | 98 | 45 | 1.3 |
| 8 | **Ill. 1919** | 104 | 20 | 80 | 86 | 99 | 44 | 3.7 |
| 9 | **Ill. 1617** | 104 | 20 | 79 | 84 | 100 | 43 | .6 |
| 10 | **Ill. 1905** | 104 | 21 | 77 | 83 | 99 | 46 | 3.8 |
| 11 | **Ill. 274-1** | 103 | 20 | 82 | 86 | 99 | 44 | .7 |
| 12 | Ill. 1918 | 103 | 22 | 81 | 81 | 98 | 44 | 3.8 |
| 13 | **Ill. 1875** | 103 | 21 | 80 | 92 | 100 | 47 | 9.2 |
| 14 | Ill. 1906 | 102 | 21 | 79 | 77 | 100 | 45 | 4.4 |
| 15 | Ill. 1913 | 101 | 20 | 83 | 74 | 98 | 44 | 3.3 |
| 16 | Ill. 1908 | 100 | 20 | 82 | 75 | 99 | 44 | 2.7 |
| 17 | Ill. 1915 | 99 | 22 | 80 | 85 | 99 | 42 | 5.6 |
| 18 | Ill. 1910 | 98 | 20 | 83 | 73 | 99 | 44 | 2.8 |
| 19 | Ill. 1904 | 98 | 21 | 79 | 60 | 98 | 46 | 2.7 |
| 20 | **Ill. 1914** | 98 | 21 | 79 | 85 | 99 | 45 | 4.0 |

(Table is concluded on next page)

### Table 4. — Concluded

| Rank in yield | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height | Dropped ears |
|---|---|---|---|---|---|---|---|---|
| | **E — 1954 results (4 replications)** | | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* | *perct.* |
| 21 | Ill. 6021 | 98 | 23 | 78 | 63 | 100 | 51 | 5.0 |
| 22 | Ill. 1916 | 97 | 20 | 82 | 68 | 99 | 46 | 3.9 |
| 23 | **Ill. 1555A** | 97 | 19 | 82 | 89 | 98 | 42 | 3.8 |
| 24 | Ill. 1917 | 97 | 19 | 82 | 77 | 96 | 43 | .7 |
| 25 | **Ill. 1896A** | 96 | 20 | 80 | 84 | 97 | 39 | 4.6 |
| 26 | Ill. 1814 | 96 | 22 | 80 | 85 | 100 | 39 | 3.2 |
| 27 | Ill. 1575 | 95 | 22 | 79 | 92 | 99 | 42 | 3.8 |
| 28 | Ill. 1277 | 94 | 20 | 83 | 85 | 97 | 41 | .7 |
| 29 | Ill. 2247W | 93 | 20 | 80 | 77 | 99 | 42 | 3.4 |
| 30 | Ill. 1868 | 93 | 22 | 80 | 93 | 99 | 42 | 4.7 |
| 31 | Ill. 1911 | 93 | 20 | 80 | 80 | 98 | 46 | 7.1 |
| 32 | Ohio 3247 | 92 | 20 | 83 | 79 | 100 | 35 | 3.8 |
| 33 | Ill. 1290 | 92 | 20 | 81 | 79 | 98 | 40 | 1.9 |
| 34 | Ill. 1831 | 92 | 24 | 81 | 91 | 99 | 38 | 4.3 |
| 35 | Ind. 1405 | 92 | 20 | 81 | 88 | 97 | 37 | 4.6 |
| 36 | Ill. 1760 | 91 | 23 | 77 | 87 | 99 | 41 | 5.1 |
| 37 | Ill. 1560A | 89 | 19 | 79 | 91 | 100 | 39 | 1.2 |
| 38 | Ill. 1909 | 88 | 20 | 80 | 76 | 95 | 43 | 5.2 |
| 39 | Ill. 1280 | 88 | 19 | 80 | 78 | 99 | 34 | 6.0 |
| 40 | Ill. 1826 | 88 | 21 | 80 | 89 | 99 | 36 | 2.0 |
| 41 | Ill. 1813 | 87 | 24 | 77 | 90 | 99 | 42 | 2.0 |
| 42 | Ind. 2401 | 86 | 21 | 80 | 89 | 99 | 37 | 4.2 |
| 43 | Ill. 1903 | 86 | 20 | 80 | 91 | 97 | 39 | 2.7 |
| 44 | Ill. 1864 | 85 | 19 | 81 | 88 | 100 | 35 | 2.6 |
| 45 | AES 702 | 84 | 21 | 79 | 88 | 98 | 40 | 2.0 |
| 46 | Ill. 1863 | 81 | 22 | 80 | 91 | 99 | 37 | 3.8 |
| 47 | AES 805 | 79 | 22 | 75 | 92 | 96 | 41 | 3.6 |
| 48 | Ill. 1873 | 77 | 22 | 77 | 93 | 100 | 36 | 4.9 |
| 49 | Iowa 4297 | 73 | 21 | 80 | 86 | 97 | 38 | 7.1 |
| | Average | 95 | 21 | 80 | 83 | 99 | 42 | 3.9 |
| | Significant difference | 8 | .. | .. | 12 | 3 | 4 | ... |

## Table 5. — THREE-WAY AND DOUBLE CROSSES OF ILLINOIS 21 MATURITY

### Tested in North-Central Illinois, 1954

(Entries in boldface were average or better in yield and standability and average or earlier in maturity)

| Code | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height | Dropped ears |
|---|---|---|---|---|---|---|---|---|
| | **A — Inbred lines crossed with (B14 × WF9)** | | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* | *perct.* |
| 1 | **B38** | 96 | 19 | 76 | 98 | 97 | 41 | 3.5 |
| 2 | C103 | 76 | 22 | 73 | 97 | 99 | 42 | 9.3 |
| 3 | Oh26A | 78 | 19 | 81 | 97 | 98 | 39 | 2.8 |
| 4 | M14 | 99 | 21 | 81 | 92 | 94 | 37 | 3.4 |
| 5 | Oh422 | 97 | 21 | 77 | 96 | 92 | 40 | 4.6 |
| 6 | **Oh28** | 106 | 19 | 79 | 96 | 99 | 38 | .7 |
| 7 | Nebr. 9206 | 102 | 19 | 82 | 80 | 99 | 40 | 4.5 |
| 8 | Oh5 | 82 | 19 | 75 | 97 | 100 | 40 | 6.2 |
| 9 | W70 | 86 | 19 | 82 | 97 | 99 | 41 | 3.8 |
| 10 | Oh43 | 113 | 20 | 82 | 93 | 99 | 38 | 2.4 |
| 11 | **Nebr. 4535** | 118 | 20 | 83 | 94 | 99 | 39 | 3.9 |
| 12 | K1603 | 110 | 18 | 81 | 90 | 96 | 41 | 1.2 |
| 13 | A73 | 73 | 18 | 82 | 97 | 99 | 35 | 0 |
| 14 | **B37** | 102 | 19 | 78 | 97 | 99 | 41 | 3.2 |
| 15 | N18 | 100 | 20 | 81 | 82 | 97 | 38 | 3.2 |
| | Average | 96 | 20 | 80 | 94 | 98 | 39 | 3.5 |
| | **B — Inbred lines crossed with (Oh28 × Oh43)** | | | | | | | |
| 16 | **B38** | 119 | 19 | 79 | 93 | 92 | 42 | 2.6 |
| 17 | C103 | 72 | 23 | 71 | 95 | 99 | 39 | 2.1 |
| 18 | Oh26A | 95 | 19 | 82 | 91 | 98 | 39 | 2.7 |
| 19 | **WF9** | 106 | 20 | 81 | 92 | 96 | 34 | 1.2 |
| 20 | M14 | 98 | 18 | 82 | 83 | 99 | 34 | .6 |
| 21 | Nebr. 9206 | 99 | 20 | 83 | 58 | 96 | 38 | 1.4 |
| 22 | Oh5 | 96 | 19 | 82 | 77 | 97 | 40 | 4.7 |
| 23 | W70 | 108 | 21 | 82 | 81 | 99 | 40 | 1.3 |
| 24 | Nebr. 4535 | 112 | 21 | 85 | 75 | 99 | 38 | 3.4 |
| 25 | K1603 | 109 | 18 | 83 | 75 | 99 | 39 | 2.9 |
| 26 | A73 | 80 | 19 | 80 | 91 | 99 | 36 | 4.6 |
| 27 | B37 | 129 | 23 | 82 | 98 | 100 | 39 | .6 |
| 28 | N18 | 91 | 22 | 79 | 68 | 98 | 36 | 2.6 |
| 29 | Nebr. 4056 | 97 | 19 | 82 | 95 | 97 | 36 | .7 |
| | Average | 101 | 20 | 81 | 84 | 98 | 38 | 2.2 |
| | **C — Double crosses** | | | | | | | |
| | **(Oh28×Oh43)(B14×WF9)** | 108 | 21 | 80 | 94 | 99 | 39 | 3.8 |
| | AES 702 | 90 | 20 | 77 | 96 | 98 | 40 | 5.9 |
| | Iowa 4297 | 87 | 21 | 80 | 92 | 98 | 40 | 1.9 |
| | Average | 95 | 21 | 79 | 94 | 98 | 40 | 3.9 |
| | Significant difference | 11 | .. | .. | 9 | 4 | 3 | ... |

## Table 6. — DOUBLE CROSSES OF U. S. 13 MATURITY Tested in Central Illinois, 1950-1954

(Entries in boldface were average or better in yield and standability and average or earlier in maturity)

| Rank in yield | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height |
|---|---|---|---|---|---|---|---|
| | **A — Five-year averages, 1950-1954** | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* |
| 1 | Ill. 1511 | 98 | 18 | 82 | 86 | 96 | 48 |
| 2 | **Ill. 1332** | 94 | 17 | 81 | 89 | 98 | 46 |
| 3 | **Ill. 972A-1** | 94 | 17 | 80 | 83 | 97 | 47 |
| 4 | U.S. 13 | 93 | 18 | 80 | 78 | 98 | 52 |
| 5 | Ill. 1570 | 93 | 18 | 80 | 78 | 97 | 47 |
| 6 | Ill. 21 | 91 | 17 | 82 | 83 | 97 | 47 |
| 7 | Ill. 274-1 | 90 | 16 | 82 | 87 | 98 | 45 |
| | Average | 93 | 17 | 81 | 83 | 97 | 47 |
| | **B — Four-year averages, 1951-1954** | | | | | | |
| 1 | **Ill. 1511** | 95 | 17 | 82 | 85 | 99 | 47 |
| 2 | **Ill. 1421** | 94 | 17 | 82 | 85 | 99 | 44 |
| 3 | **Ill. 1332** | 92 | 16 | 82 | 88 | 98 | 46 |
| 4 | **Ill. 972A-1** | 91 | 16 | 80 | 82 | 99 | 47 |
| 5 | **Ill. 1777** | 91 | 17 | 80 | 83 | 98 | 46 |
| 6 | U.S. 13 | 90 | 17 | 80 | 77 | 98 | 51 |
| 7 | Ill. 1759 | 90 | 18 | 80 | 81 | 98 | 46 |
| 8 | Ill. 1788 | 90 | 18 | 79 | 80 | 100 | 47 |
| 9 | Ill. 1764 | 88 | 17 | 79 | 82 | 99 | 47 |
| 10 | Ill. 1570 | 88 | 18 | 80 | 77 | 99 | 47 |
| 11 | Ill. 274-1 | 86 | 16 | 82 | 84 | 100 | 45 |
| 12 | AES 805 | 86 | 17 | 80 | 90 | 97 | 43 |
| 13 | Ill. 1767 | 84 | 18 | 81 | 77 | 100 | 45 |
| | Average | 90 | 17 | 80 | 82 | 99 | 46 |
| | **C — Three-year averages, 1952-1954** | | | | | | |
| 1 | Ill. 1511 | 94 | 17 | 83 | 87 | 99 | 47 |
| 2 | Ill. 1421 | 94 | 17 | 82 | 85 | 99 | 43 |
| 3 | **Ill. 1332** | 91 | 15 | 82 | 91 | 98 | 45 |
| 4 | Ill. 1777 | 91 | 17 | 80 | 89 | 99 | 45 |
| 5 | **AES 801** | 90 | 16 | 79 | 94 | 96 | 39 |
| 6 | Ill. 1570 | 90 | 17 | 80 | 84 | 99 | 47 |
| 7 | **Ill. 972A-1** | 89 | 16 | 79 | 83 | 98 | 47 |
| 8 | U.S. 13 | 88 | 16 | 81 | 83 | 98 | 50 |
| 9 | Ill. 1788 | 88 | 17 | 78 | 80 | 99 | 48 |
| 10 | Mo. 4041W | 88 | 18 | 77 | 80 | 99 | 49 |
| 11 | **AES 802** | 87 | 16 | 80 | 90 | 88 | 43 |
| 12 | Ill. 1759 | 87 | 17 | 78 | 83 | 98 | 45 |
| 13 | Ill. 274-1 | 86 | 15 | 82 | 90 | 99 | 44 |
| 14 | Ill. 21 | 86 | 16 | 82 | 89 | 98 | 46 |
| 15 | Ohio 4808 | 86 | 17 | 80 | 92 | 98 | 40 |
| 16 | Ill. 1764 | 83 | 16 | 79 | 87 | 98 | 46 |
| 17 | Ill. 1767 | 82 | 17 | 80 | 86 | 99 | 45 |
| 18 | AES 803 | 81 | 16 | 79 | 90 | 97 | 40 |
| 19 | AES 805 | 79 | 17 | 80 | 92 | 95 | 42 |
| | Average | 87 | 16 | 80 | 87 | 98 | 45 |

(Table is continued on next page)

Table 6. — Continued

D — Two-year averages, 1953-1954

| Rank in yield | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height |
|---|---|---|---|---|---|---|---|
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* |
| 1 | Ill. 1896 | 92 | 16 | 82 | 82 | 98 | 42 |
| 2 | Ill. 1511 | 90 | 17 | 83 | 84 | 98 | 47 |
| 3 | Ill. 1421 | 88 | 17 | 82 | 78 | 98 | 42 |
| 4 | **Ill. 1332** | 87 | 15 | 82 | 88 | 98 | 46 |
| 5 | Ill. 1777 | 87 | 17 | 81 | 85 | 100 | 45 |
| 6 | Ill. 1570 | 86 | 17 | 81 | 77 | 98 | 47 |
| 7 | U.S. 13 | 83 | 16 | 82 | 80 | 98 | 48 |
| 8 | Ill. 972A-1 | 82 | 16 | 79 | 76 | 98 | 46 |
| 9 | Mo. 4041W | 82 | 17 | 79 | 76 | 98 | 48 |
| 10 | **AES 802** | 80 | 16 | 80 | 88 | 88 | 42 |
| 11 | **AES 801** | 80 | 16 | 78 | 91 | 95 | 39 |
| 12 | Ill. 1788 | 80 | 17 | 80 | 72 | 98 | 46 |
| 13 | **Ill. 21** | 78 | 16 | 82 | 86 | 98 | 46 |
| 14 | **Ohio 4808** | 78 | 16 | 80 | 89 | 98 | 38 |
| 15 | Ill. 1813 | 78 | 17 | 81 | 90 | 96 | 40 |
| 16 | Ill. 1890 | 76 | 16 | 79 | 90 | 100 | 42 |
| 17 | Ill. 1759 | 76 | 16 | 78 | 76 | 98 | 44 |
| 18 | Ill. 274-1 | 75 | 16 | 82 | 85 | 100 | 44 |
| 19 | Ill. 1767 | 75 | 16 | 82 | 80 | 99 | 45 |
| 20 | Ill. 1764 | 72 | 16 | 78 | 84 | 97 | 46 |
| 21 | AES 803 | 71 | 16 | 80 | 88 | 96 | 38 |
| 22 | Ill. 1880 | 70 | 15 | 82 | 85 | 95 | 42 |
| 23 | Ill. 6075 | 68 | 16 | 82 | 67 | 96 | 39 |
| 24 | AES 805 | 68 | 17 | 80 | 90 | 94 | 40 |
| 25 | Ill. 1884 | 67 | 16 | 76 | 90 | 96 | 43 |
| 26 | Ill. 1877 | 66 | 16 | 78 | 96 | 98 | 38 |
| 27 | Ill. 1876 | 63 | 16 | 77 | 88 | 96 | 44 |
| 28 | Ill. 1889 | 62 | 18 | 76 | 96 | 98 | 44 |
| | Average | 77 | 16 | 80 | 84 | 97 | 43 |

(Table is concluded on next page)

Table 6. — Concluded

| Rank in yield | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height | Dropped ears | Smutted plants |
|---|---|---|---|---|---|---|---|---|---|
| | **E — 1954 results (4 replications)** | | | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* | *perct.* | *perct.* |
| 1 | Ill. 1511 | 99 | 18 | 84 | 86 | 98 | 42 | 5.4 | 9.4 |
| 2 | Tenn. 3473 | 98 | 21 | 83 | 79 | 98 | 40 | 0 | 7.0 |
| 3 | Ill. 1896 | 97 | 17 | 83 | 90 | 97 | 38 | 11.8 | 3.8 |
| 4 | Ill. 1913 | 96 | 18 | 84 | 93 | 95 | 38 | 4.0 | 4.0 |
| 5 | Ill. 1919 | 94 | 16 | 83 | 90 | 97 | 38 | 1.3 | 7.7 |
| 6 | Ill. 1911 | 94 | 17 | 82 | 89 | 99 | 40 | 6.9 | 2.5 |
| 7 | Ill. 1777 | 92 | 18 | 81 | 91 | 100 | 40 | 3.8 | 5.7 |
| 8 | U.S. 13 | 91 | 16 | 82 | 86 | 97 | 42 | 5.3 | 5.2 |
| 9 | AES 806 | 91 | 19 | 83 | 86 | 99 | 35 | 7.6 | 6.3 |
| 10 | Ill. 1570 | 91 | 19 | 81 | 85 | 99 | 40 | 10.5 | 9.4 |
| 11 | Ill. 1332 | 90 | 17 | 83 | 90 | 97 | 40 | 1.9 | 5.8 |
| 12 | Ill. 1918 | 88 | 17 | 79 | 87 | 100 | 39 | 4.7 | 2.5 |
| 13 | Mo. 4041W | 87 | 19 | 80 | 92 | 100 | 40 | 5.6 | 5.7 |
| 14 | Ind. 2609 | 87 | 16 | 81 | 83 | 99 | 37 | 4.3 | 6.3 |
| 15 | Ill. 1908 | 86 | 17 | 84 | 96 | 93 | 39 | 3.7 | .7 |
| 16 | Ill. 1915 | 86 | 17 | 79 | 89 | 97 | 39 | 2.1 | 0 |
| 17 | Ill. 1906 | 85 | 17 | 80 | 78 | 96 | 37 | 8.8 | 5.8 |
| 18 | Ill. 1914 | 85 | 18 | 80 | 88 | 99 | 40 | 2.6 | 2.5 |
| 19 | Ill. 1421 | 85 | 18 | 81 | 87 | 99 | 38 | 2.0 | 7.6 |
| 20 | Ind. 9502 | 85 | 19 | 80 | 96 | 99 | 34 | .7 | 3.8 |
| 21 | Ill. 1909 | 84 | 17 | 82 | 90 | 97 | 41 | 3.3 | 7.1 |
| 22 | Ill. 972A-1 | 84 | 17 | 76 | 80 | 98 | 40 | 0 | 1.3 |
| 23 | Ill. 1788 | 83 | 18 | 79 | 87 | 98 | 38 | 4.2 | 5.1 |
| 24 | Ill. 1916 | 83 | 17 | 82 | 88 | 96 | 39 | 3.5 | 13.1 |
| 25 | AES 801 | 83 | 17 | 76 | 94 | 97 | 34 | 1.9 | 4.5 |
| 26 | Ill. 6021 | 82 | 18 | 80 | 75 | 94 | 45 | 4.4 | 4.0 |
| 27 | Ill. 21 | 81 | 18 | 82 | 96 | 99 | 41 | 9.9 | 13.3 |
| 28 | Ill. 1904 | 79 | 16 | 78 | 88 | 94 | 39 | 4.2 | 8.7 |
| 29 | Ill. 1917 | 79 | 17 | 81 | 76 | 97 | 37 | 2.6 | 7.0 |
| 30 | Ill. 1910 | 77 | 17 | 84 | 90 | 99 | 37 | 4.7 | 13.3 |
| 31 | Ill. 1912 | 76 | 17 | 80 | 94 | 97 | 37 | 3.6 | 9.6 |
| 32 | AES 802 | 76 | 17 | 77 | 97 | 80 | 38 | 5.3 | 16.4 |
| 33 | Ill. 274-1 | 76 | 17 | 81 | 95 | 100 | 37 | .7 | 5.0 |
| 34 | Ill. 1905 | 75 | 17 | 76 | 91 | 99 | 38 | 3.7 | 6.3 |
| 35 | Ill. 1759 | 74 | 18 | 78 | 83 | 97 | 38 | 2.9 | 3.8 |
| 36 | Ill. 1813 | 73 | 18 | 80 | 91 | 100 | 36 | 4.2 | 10.6 |
| 37 | Ill. 1890 | 71 | 18 | 78 | 94 | 100 | 38 | .6 | 21.7 |
| 38 | Ill. 1767 | 71 | 18 | 81 | 87 | 99 | 40 | 4.5 | 18.9 |
| 39 | Ill. 6075 | 71 | 18 | 82 | 70 | 100 | 35 | 7.4 | 5.7 |
| 40 | Ohio 4808 | 69 | 18 | 79 | 91 | 98 | 35 | 0 | 10.1 |
| 41 | Iowa 4615 | 69 | 17 | 79 | 96 | 97 | 40 | .7 | 10.8 |
| 42 | AES 803 | 68 | 17 | 78 | 93 | 99 | 36 | 5.0 | 20.8 |
| 43 | Ill. 1764 | 66 | 16 | 76 | 90 | 95 | 40 | 1.5 | 14.4 |
| 44 | Ill. 1880 | 63 | 16 | 81 | 86 | 98 | 37 | 5.1 | 5.7 |
| 45 | AES 805 | 58 | 18 | 79 | 97 | 90 | 35 | .6 | 17.7 |
| 46 | Ill. 1884 | 54 | 18 | 71 | 93 | 97 | 38 | 7.4 | 19.2 |
| 47 | Ill. 1876 | 51 | 19 | 73 | 92 | 94 | 37 | 4.8 | 28.9 |
| 48 | Ill. 1877 | 50 | 19 | 74 | 99 | 98 | 35 | 9.7 | 25.3 |
| 49 | Ill. 1889 | 46 | 20 | 73 | 99 | 97 | 36 | 2.7 | 24.0 |
| | Average | 79 | 18 | 80 | 89 | 97 | 38 | 4.1 | 9.3 |
| | Significant difference | 16 | .. | .. | 8 | 6 | 3 | ... | ... |

## Table 7. — SINGLE AND DOUBLE CROSSES OF U. S. 13 MATURITY
### Tested in Central Illinois, 1954

(Entries in boldface were average or better in yield and standability and average or earlier in maturity)

| Code | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height | Dropped ears | Smutted plants |
|---|---|---|---|---|---|---|---|---|---|
| | **A — Single crosses** | | | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* | *perct.* | *perct.* |
| 1 | R71×R98 | 87 | 18 | 84 | 97 | 100 | 38 | 1.4 | 0 |
| 2 | R71×R105 | 81 | 21 | 80 | 97 | 100 | 37 | 0 | 0 |
| 3 | R71×R113 | 61 | 17 | 78 | 97 | 100 | 34 | 0 | 0 |
| 4 | R98×R105 | 98 | 19 | 81 | 97 | 100 | 44 | 0 | 10.0 |
| 5 | R98×R113 | 73 | 17 | 81 | 95 | 94 | 41 | 0 | 6.2 |
| 6 | R105×R113 | 75 | 18 | 77 | 96 | 88 | 40 | 0 | 0 |
| 7 | R71×R130 | 95 | 16 | 84 | 91 | 100 | 45 | 4.7 | 1.7 |
| 8 | R98×R130 | 111 | 17 | 83 | 83 | 99 | 50 | 0 | 4.2 |
| 9 | R105×R130 | 83 | 21 | 79 | 90 | 97 | 46 | 1.8 | .8 |
| 10 | R113×R130 | 85 | 16 | 79 | 81 | 100 | 44 | 2.6 | 0 |
| 11 | R71×R151 | 80 | 18 | 82 | 94 | 100 | 39 | 1.8 | 0 |
| 12 | R98×R151 | 86 | 17 | 84 | 92 | 98 | 43 | 0 | 11.9 |
| 13 | R105×R151 | 92 | 22 | 80 | 94 | 100 | 43 | 5.6 | 2.5 |
| 14 | R113×R151 | 77 | 16 | 82 | 92 | 99 | 43 | 5.0 | 0 |
| 15 | R130×R151 | 92 | 17 | 85 | 86 | 99 | 46 | 0 | .8 |
| 16 | R71×R153 | 91 | 17 | 83 | 99 | 100 | 37 | .5 | 0 |
| 17 | R98×R153 | 94 | 20 | 82 | 90 | 99 | 43 | 0 | 2.5 |
| 18 | R105×R153 | 99 | 20 | 80 | 100 | 99 | 39 | .8 | 0 |
| 19 | R113×R153 | 81 | 17 | 80 | 96 | 100 | 37 | 0 | 0 |
| 20 | R130×R153 | 101 | 18 | 82 | 80 | 100 | 45 | .8 | 1.7 |
| 21 | R151×R153 | 97 | 18 | 81 | 79 | 99 | 43 | 1.5 | .8 |
| 22 | R71×R154 | 81 | 17 | 84 | 94 | 100 | 37 | 1.6 | 0 |
| 23 | R98×R154 | 95 | 16 | 86 | 72 | 96 | 46 | 0 | 1.7 |
| 24 | R105×R154 | 101 | 18 | 85 | 93 | 99 | 42 | .9 | 0 |
| 25 | R113×R154 | 84 | 15 | 84 | 76 | 98 | 38 | 0 | 0 |
| 26 | R130×R154 | 111 | 15 | 86 | 77 | 100 | 49 | 1.7 | 0 |
| 27 | R151×R154 | 99 | 16 | 87 | 91 | 99 | 43 | 2.8 | 1.7 |
| 28 | R153×R154 | 96 | 17 | 88 | 78 | 98 | 42 | 0 | .8 |
| 29 | R71×R155 | 85 | 17 | 83 | 95 | 100 | 40 | 0 | 0 |
| 30 | R98×R155 | 90 | 16 | 83 | 73 | 100 | 45 | 0 | .8 |
| 31 | R105×R155 | 92 | 20 | 82 | 93 | 99 | 42 | 0 | 0 |
| 32 | R113×R155 | 72 | 16 | 81 | 97 | 98 | 40 | 0 | .8 |
| 33 | R130×R155 | 105 | 16 | 84 | 88 | 100 | 46 | 2.5 | 0 |
| 34 | R151×R155 | 88 | 18 | 83 | 91 | 100 | 45 | 2.5 | 0 |
| 35 | R153×R155 | 87 | 19 | 81 | 79 | 100 | 44 | 0 | 0 |
| 36 | R154×R155 | 80 | 16 | 85 | 75 | 99 | 43 | .9 | 0 |
| 37 | R71×R156 | 90 | 19 | 85 | 98 | 99 | 37 | .8 | .8 |
| 38 | R98×R156 | 81 | 17 | 78 | 90 | 100 | 43 | 0 | 14.2 |
| 39 | R105×R156 | 75 | 22 | 78 | 100 | 100 | 38 | 0 | 3.3 |
| 40 | R113×R156 | 73 | 17 | 77 | 93 | 97 | 35 | 0 | 5.1 |
| 41 | R130×R156 | 91 | 18 | 81 | 98 | 99 | 45 | 1.0 | .8 |
| 42 | R151×R156 | 90 | 18 | 85 | 89 | 100 | 39 | 0 | 6.7 |
| 43 | R153×R156 | 75 | 20 | 79 | 97 | 99 | 36 | .8 | 3.4 |
| 44 | R154×R156 | 92 | 17 | 83 | 83 | 100 | 42 | 1.7 | .8 |
| 45 | R155×R156 | 80 | 17 | 84 | 76 | 100 | 40 | 1.7 | 2.5 |
| | Average | 88 | 18 | 82 | 89 | 99 | 42 | 1.0 | 1.9 |
| | **B — Double crosses** | | | | | | | | |
| | Ill. 6021 | 90 | 16 | 81 | 87 | 99 | 48 | 8.9 | 8.4 |
| | U.S. 13 | 87 | 17 | 82 | 91 | 99 | 42 | 4.0 | 12.6 |
| | Ill. 6016 | 84 | 16 | 84 | 74 | 99 | 44 | 3.6 | 17.6 |
| | AES 805 | 74 | 16 | 77 | 94 | 100 | 38 | 5.6 | 20.0 |
| | Average | 84 | 16 | 81 | 86 | 99 | 43 | 5.5 | 14.6 |
| | Significant difference | 9 | .. | .. | 10 | 2 | 3 | ... | ... |

## Table 8. — THREE-WAY AND DOUBLE CROSSES OF U. S. 13 MATURITY

### Tested in Central Illinois, 1954

(Entries in boldface were average or better in yield and standability and average or earlier in maturity)

| Code | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height | Dropped ears | Smutted plants |
|---|---|---|---|---|---|---|---|---|---|
| | **Inbred lines crossed with (WF9 × Hy)** | | | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* | *perct.* | *perct.* |
| 1 | R95 | 108 | 17 | 82 | 71 | 96 | 40 | 2.0 | 2.6 |
| 2 | R96 | 99 | 15 | 80 | 84 | 98 | 43 | 9.5 | 8.9 |
| 3 | R98 | 77 | 17 | 82 | 82 | 98 | 39 | 2.1 | 24.8 |
| 4 | R101 | 82 | 17 | 80 | 99 | 99 | 39 | 2.0 | 5.1 |
| 5 | N5 | 85 | 18 | 77 | 76 | 98 | 40 | 3.5 | 7.0 |
| 6 | N12 | 76 | 18 | 80 | 95 | 94 | 38 | .7 | 12.0 |
| 7 | **N13** | 99 | 18 | 83 | 89 | 99 | 41 | 4.5 | 19.6 |
| 8 | K1605 | 89 | 18 | 79 | 80 | 98 | 38 | 0 | 17.2 |
| 9 | B36 | 74 | 18 | 76 | 92 | 99 | 41 | 16.9 | 27.0 |
| 10 | Oh451 | 110 | 19 | 82 | 83 | 99 | 41 | 2.6 | 5.7 |
| 11 | **38-11** | 98 | 18 | 82 | 90 | 97 | 41 | 11.5 | 14.2 |
| 12 | L317 | 98 | 18 | 82 | 76 | 99 | 45 | 5.5 | 2.5 |
| | Average | 91 | 18 | 80 | 85 | 98 | 40 | 5.1 | 12.2 |
| | **Inbred lines crossed with (WF9 × 38-11)** | | | | | | | | |
| 13 | **R95** | 96 | 17 | 82 | 91 | 94 | 40 | 6.4 | 10.7 |
| 14 | R96 | 92 | 17 | 82 | 86 | 95 | 41 | 9.9 | 11.8 |
| 15 | R98 | 79 | 18 | 81 | 92 | 94 | 41 | 2.6 | 39.3 |
| 16 | R101 | 77 | 17 | 82 | 98 | 96 | 36 | 1.3 | 12.4 |
| 17 | N5 | 88 | 18 | 78 | 76 | 98 | 39 | .7 | 9.0 |
| 18 | N12 | 78 | 17 | 81 | 95 | 98 | 40 | .7 | 28.2 |
| 19 | N13 | 73 | 18 | 80 | 94 | 98 | 40 | 4.9 | 49.7 |
| 20 | K1605 | 91 | 18 | 82 | 88 | 96 | 38 | .7 | 29.4 |
| 21 | L317 | 101 | 17 | 82 | 89 | 94 | 46 | 10.9 | 15.2 |
| 22 | Hy | 79 | 18 | 83 | 87 | 79 | 40 | 7.9 | 10.2 |
| | Average | 85 | 18 | 81 | 90 | 94 | 40 | 4.6 | 21.6 |
| | **Double crosses** | | | | | | | | |
| | AES 805 | 98 | 17 | 81 | 90 | 98 | 46 | 7.0 | 4.5 |
| | U.S. 13 | 60 | 18 | 76 | 95 | 97 | 38 | 3.7 | 31.6 |
| | Average | 79 | 18 | 78 | 92 | 98 | 42 | 5.4 | 18.0 |
| | Significant difference | 19 | .. | .. | 10 | 6 | 4 | ... | ... |

## Table 9. — UNIFORM TEST OF BLIGHT-RESISTANT THREE-WAY CROSSES AND STANDARDS OF U. S. 13 MATURITY

### Tested in Central Illinois, 1954

(Entries in **boldface** were average or better in yield and standability and average or earlier in maturity)

| Code | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height | Dropped ears | Smutted plants |
|---|---|---|---|---|---|---|---|---|---|
| | **A — Inbred lines crossed on (WF9 × 38-11)** | | | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* | *perct.* | *perct.* |
| 1 | Hy | 87 | 16 | 83 | 92 | 95 | 42 | 11.7 | 13.0 |
| 2 | **CI.42A** | 103 | 17 | 85 | 88 | 96 | 45 | 9.8 | 7.3 |
| 3 | CI.42B | 104 | 16 | 85 | 71 | 90 | 47 | 8.6 | 4.3 |
| 4 | CI.42C | 92 | 16 | 82 | 83 | 94 | 42 | 5.8 | 22.5 |
| 5 | **Hy(Mo.21A)B× 1-S6 AJU 13700** | 102 | 17 | 84 | 98 | 96 | 45 | 7.5 | 4.1 |
| 6 | Hy(Mo.21A)B× 2-S4 AJU 13706 | 111 | 16 | 84 | 87 | 97 | 46 | 6.7 | 5.6 |
| 7 | Hy(Mo.21A)B× 2-S4 AJU 13711 | 97 | 17 | 85 | 91 | 86 | 44 | 6.9 | 10.0 |
| 8 | L317 | 103 | 16 | 83 | 83 | 96 | 48 | 15.7 | 8.1 |
| 9 | CI.317A | 102 | 18 | 78 | 90 | 88 | 49 | 7.3 | 14.3 |
| 10 | CI.317B | 110 | 18 | 80 | 94 | 98 | 50 | .8 | 12.6 |
| 11 | (L317×L97)-B-#3-S4 | 96 | 18 | 82 | 92 | 92 | 48 | 3.6 | 6.7 |
| 12 | (L317×L97)-B-#3-S6 | 98 | 19 | 80 | 96 | 96 | 47 | 6.4 | 6.4 |
| 13 | (L317×L97)-B-#3-S9 | 101 | 18 | 80 | 82 | 97 | 49 | 5.5 | 11.9 |
| 14 | (L317×L97)-B-#3-S10 | 105 | 18 | 80 | 89 | 94 | 47 | 10.5 | 5.0 |
| 15 | L317(Mo.21A)B× 1-S6 AJU 13676 | 98 | 17 | 82 | 84 | 92 | 48 | 5.0 | 6.8 |
| 16 | L317(Mo.21A)B× 1-S6 AJU 13683 | 103 | 17 | 81 | 86 | 99 | 45 | 15.8 | 8.6 |
| 17 | L317(Mo.21A)B× 2-S4 AJU 13688-8 | 96 | 17 | 82 | 76 | 93 | 45 | 7.5 | 1.7 |
| 18 | L317(Mo.21A)B× 2-S4 AJU 13688-13 | 94 | 18 | 82 | 89 | 87 | 45 | 9.5 | 4.5 |
| 19 | Os 420 | 80 | 16 | 81 | 88 | 95 | 35 | 8.0 | 12.2 |
| 20 | (Os420×NC34)-B-#4-S2-1 | 88 | 16 | 82 | 92 | 100 | 46 | 10.8 | 36.2 |
| 21 | (Os420×NC34)-B-#4-S9-(x) | 97 | 17 | 82 | 94 | 98 | 43 | 22.3 | 11.8 |
| 22 | (Os420×NC34)-B-#4-S12-(x) | 82 | 17 | 83 | 98 | 96 | 39 | 17.9 | 12.8 |
| | Average | 98 | 17 | 82 | 88 | 94 | 45 | 9.3 | 10.3 |
| | **B — Inbred lines crossed on (Hy × L317)** | | | | | | | | |
| 23 | **WF9** | 110 | 17 | 85 | 84 | 99 | 46 | 8.3 | 4.6 |
| 24 | CI.29A | 103 | 17 | 84 | 71 | 97 | 45 | 8.9 | 7.9 |
| 25 | **CI.29B** | 113 | 16 | 82 | 84 | 100 | 50 | 5.8 | 0 |
| 26 | **CI.29C** | 109 | 16 | 82 | 86 | 98 | 49 | 14.2 | 3.1 |
| 27 | (WF9×NC34)-B-#3-S8-3-1 | 101 | 18 | 80 | 75 | 99 | 46 | 3.0 | 3.1 |
| 28 | (WF9×NC34)-B-#3-S10-1-1 | 105 | 18 | 81 | 79 | 92 | 48 | 1.7 | 0 |
| 29 | 38-11 | 97 | 17 | 82 | 88 | 98 | 48 | 9.5 | 9.4 |
| 30 | CI.38A | 103 | 18 | 82 | 83 | 99 | 49 | 21.0 | 8.5 |
| 31 | CI.38B | 111 | 18 | 81 | 87 | 99 | 53 | 11.7 | 9.4 |
| 32 | (38-11×NC34)-B-#3-S2-1-2-(x) | 99 | 19 | 79 | 78 | 97 | 52 | 8.3 | 14.4 |

(Table is concluded on next page)

Table 9. — Concluded

| Code | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height | Dropped ears | Smutted plants |
|---|---|---|---|---|---|---|---|---|---|
| | **B — Inbred lines crossed on (Hy × L317) (concluded)** | | | | | | | | |
| 33 | (38-11×NC34)-B-#3-S4-2-1 | 102 | 18 | 83 | 83 | 98 | 50 | 6.7 | 3.1 |
| 34 | (38-11×NC34)-B-#3-S7-1-1 | 101 | 18 | 79 | 75 | 99 | 50 | 10.8 | 4.6 |
| 35 | 38-11(Mo.21A)B× 1-S6 AJU 13734 | 103 | 17 | 83 | 89 | 99 | 48 | 8.3 | 10.1 |
| 36 | **38-11(Mo.21A)B× 1-S2-#3-S1 AJU 13755** | 118 | 17 | 84 | 91 | 96 | 49 | 7.0 | 3.2 |
| | Average | 105 | 17 | 82 | 82 | 98 | 49 | 8.9 | 5.8 |
| | **C — Standards** | | | | | | | | |
| | Hy×L317 | 119 | 18 | 83 | 72 | 94 | 51 | 3.3 | .8 |
| | **WF9×38-11** | 99 | 17 | 84 | 97 | 98 | 38 | 25.0 | 43.8 |
| | U.S. 13 | 90 | 17 | 82 | 92 | 95 | 44 | 10.0 | 10.6 |
| | AES 805 | 79 | 17 | 81 | 99 | 99 | 38 | 4.3 | 24.0 |
| | Average | 97 | 17 | 82 | 90 | 96 | 43 | 10.6 | 19.8 |
| | Significant difference | 12 | .. | .. | 11 | 9 | 4 | ... | ... |

## Table 10. — DOUBLE CROSSES OF ILLINOIS 448 MATURITY
### Tested in South-Central Illinois, 1950-1954

(Entries in boldface were average or better in yield and standability and average or earlier in maturity)

| Rank in yield | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height |
|---|---|---|---|---|---|---|---|
| | **A — Five-year averages, 1950-1954** | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* |
| 1 | Ill. 1657 | 80 | 21 | 80 | 74 | 99 | 46 |
| 2 | **Ill. 1539A** | 77 | 19 | 79 | 85 | 99 | 45 |
| 3 | U.S. 13 | 76 | 17 | 81 | 73 | 99 | 44 |
| 4 | **Ill. 1349** | 76 | 18 | 81 | 83 | 98 | 46 |
| 5 | **Ill. 1332** | 75 | 17 | 82 | 85 | 98 | 40 |
| 6 | Ill. 2214W | 75 | 20 | 79 | 78 | 98 | 45 |
| 7 | Ill. 2235W | 75 | 21 | 79 | 89 | 99 | 45 |
| 8 | Ill. 1570 | 74 | 17 | 80 | 80 | 99 | 39 |
| 9 | Ill. 200 | 71 | 18 | 80 | 73 | 99 | 45 |
| 10 | Mo. 804 | 70 | 19 | 77 | 78 | 93 | 49 |
| | Average | 75 | 19 | 80 | 80 | 98 | 44 |
| | **B — Four-year averages, 1951-1954** | | | | | | |
| 1 | Ill. 1657 | 72 | 20 | 80 | 74 | 99 | 45 |
| 2 | Mo. 862 | 72 | 22 | 76 | 80 | 100 | 45 |
| 3 | **Ill. 1332** | 70 | 16 | 83 | 86 | 99 | 38 |
| 4 | Ill. 1570 | 70 | 16 | 80 | 80 | 100 | 38 |
| 5 | U.S. 13 | 69 | 16 | 82 | 75 | 99 | 41 |
| 6 | **Ill. 1656** | 69 | 17 | 82 | 83 | 99 | 38 |
| 7 | **Ill. 1349** | 69 | 18 | 81 | 88 | 99 | 44 |
| 8 | **Ill. 1539A** | 69 | 18 | 79 | 85 | 100 | 44 |
| 9 | Ill. 1771 | 68 | 19 | 78 | 91 | 98 | 44 |
| 10 | Ill. 2235W | 68 | 21 | 78 | 88 | 99 | 44 |
| 11 | Ill. 1788 | 67 | 16 | 79 | 78 | 99 | 40 |
| 12 | Ill. 2214W | 67 | 18 | 78 | 79 | 99 | 43 |
| 13 | Ill. 200 | 63 | 18 | 79 | 73 | 99 | 42 |
| 14 | Mo. 804 | 62 | 18 | 76 | 79 | 98 | 48 |
| | Average | 68 | 18 | 79 | 81 | 99 | 42 |
| | **C — Three-year averages, 1952-1954** | | | | | | |
| 1 | U.S. 13 | 62 | 14 | 82 | 77 | 99 | 42 |
| 2 | Ill. 1570 | 62 | 15 | 80 | 78 | 100 | 38 |
| 3 | **Ill. 1656** | 62 | 16 | 82 | 83 | 100 | 39 |
| 4 | Ill. 1859 | 62 | 16 | 80 | 79 | 100 | 42 |
| 5 | Ill. 1851 | 62 | 17 | 79 | 80 | 100 | 45 |
| 6 | Ill. 1857 | 61 | 19 | 77 | 84 | 99 | 44 |
| 7 | Ill. 1511 | 60 | 14 | 83 | 74 | 98 | 40 |
| 8 | **Ill. 1332** | 60 | 16 | 82 | 82 | 99 | 39 |
| 9 | Ill. 1856 | 60 | 19 | 79 | 77 | 100 | 42 |
| 10 | Mo. 862 | 59 | 20 | 75 | 79 | 99 | 45 |
| 11 | Ill. 1788 | 58 | 16 | 78 | 75 | 99 | 41 |
| 12 | **Ill. 1349** | 58 | 17 | 81 | 88 | 99 | 45 |
| 13 | AES 805 | 57 | 16 | 80 | 88 | 99 | 38 |
| 14 | Ill. 1657 | 57 | 20 | 79 | 69 | 98 | 43 |
| 15 | Ill. 1852 | 56 | 17 | 75 | 80 | 100 | 43 |
| 16 | Ill. 1539A | 56 | 18 | 78 | 86 | 100 | 43 |
| 17 | Ill. 1849 | 56 | 19 | 75 | 90 | 99 | 41 |
| 18 | Ill. 1771 | 55 | 19 | 76 | 89 | 97 | 42 |
| 19 | Ill. 2235W | 55 | 21 | 77 | 88 | 99 | 44 |
| 20 | Ill. 200 | 54 | 16 | 77 | 71 | 99 | 44 |
| 21 | Ill. 1850 | 54 | 19 | 75 | 87 | 99 | 42 |
| 22 | Mo. 804 | 50 | 17 | 75 | 79 | 99 | 48 |
| 23 | Ill. 2214W | 48 | 17 | 76 | 75 | 99 | 41 |
| | Average | 58 | 17 | 78 | 81 | 99 | 42 |

(Table is continued on next page)

Table 10. — Continued

| Rank in yield | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height | Leaf firing[a] | Dropped ears |
|---|---|---|---|---|---|---|---|---|---|
| | **D — Two-year averages, 1953-1954** | | | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* | *grade* | *perct.* |
| 1 | Ill. 1897 | 52 | 14 | 80 | 74 | 100 | 38 | ... | ... |
| 2 | Ill. 1570 | 52 | 14 | 79 | 71 | 100 | 38 | ... | ... |
| 3 | **Ill. 1859** | 51 | 14 | 80 | 76 | 100 | 41 | ... | ... |
| 4 | Ill. 1896 | 50 | 14 | 84 | 75 | 98 | 37 | ... | ... |
| 5 | **Ill. 2246W** | 50 | 14 | 80 | 82 | 100 | 38 | ... | ... |
| 6 | **Ill. 1332** | 50 | 16 | 82 | 80 | 99 | 37 | ... | ... |
| 7 | U.S. 13 | 49 | 14 | 81 | 70 | 100 | 41 | ... | ... |
| 8 | **Ill. 1656** | 49 | 16 | 80 | 79 | 100 | 39 | ... | ... |
| 9 | Ill. 1511 | 48 | 14 | 83 | 73 | 97 | 38 | ... | ... |
| 10 | **Ill. 6076** | 48 | 14 | 82 | 60 | 99 | 38 | ... | ... |
| 11 | Ill. 1851 | 48 | 16 | 80 | 75 | 100 | 43 | ... | ... |
| 12 | Ill. 1788 | 48 | 16 | 78 | 72 | 98 | 40 | ... | ... |
| 13 | Ill. 1857 | 48 | 18 | 78 | 80 | 98 | 42 | ... | ... |
| 14 | **AES 805** | 46 | 14 | 80 | 86 | 99 | 36 | ... | ... |
| 15 | **Ill. 1349** | 44 | 16 | 78 | 86 | 100 | 43 | ... | ... |
| 16 | **Ill. 1893** | 44 | 16 | 76 | 86 | 98 | 40 | ... | ... |
| 17 | Ill. 1856 | 44 | 18 | 79 | 76 | 99 | 40 | ... | ... |
| 18 | Mo. 862 | 44 | 18 | 74 | 76 | 100 | 42 | ... | ... |
| 19 | Ill. 6075 | 43 | 14 | 80 | 62 | 100 | 36 | ... | ... |
| 20 | Ill. 200 | 42 | 16 | 76 | 70 | 99 | 42 | ... | ... |
| 21 | Ill. 1852 | 42 | 17 | 74 | 78 | 100 | 42 | ... | ... |
| 22 | Ill. 1539A | 41 | 16 | 78 | 80 | 100 | 40 | ... | ... |
| 23 | Ill. 1657 | 41 | 19 | 78 | 64 | 98 | 41 | ... | ... |
| 24 | Ill. 6102 | 40 | 16 | 73 | 60 | 100 | 38 | ... | ... |
| 25 | Ill. 1849 | 40 | 18 | 74 | 90 | 98 | 40 | ... | ... |
| 26 | Ill. 1771 | 40 | 18 | 74 | 87 | 96 | 40 | ... | ... |
| 27 | Ill. 2235W | 38 | 20 | 76 | 88 | 99 | 41 | ... | ... |
| 28 | Ill. 1850 | 36 | 18 | 74 | 86 | 98 | 40 | ... | ... |
| 29 | Mo. 804 | 35 | 17 | 74 | 76 | 98 | 46 | ... | ... |
| 30 | Ill. 6079 | 34 | 16 | 78 | 58 | 98 | 38 | ... | ... |
| 31 | Ill. 2214W | 31 | 16 | 74 | 67 | 100 | 39 | ... | ... |
| | Average | 44 | 16 | 78 | 76 | 99 | 40 | ... | ... |
| | **E — 1954 results (4 replications)** | | | | | | | | |
| 1 | Ill. 1851 | 53 | 15 | 80 | 52 | 100 | 32 | 1.5 | 0 |
| 2 | Ill. 1857 | 51 | 17 | 80 | 69 | 99 | 32 | 1.2 | 4.2 |
| 3 | Ill. 1788 | 49 | 15 | 79 | 54 | 100 | 29 | 2.2 | .8 |
| 4 | **Ill. 1656** | 49 | 16 | 80 | 60 | 100 | 28 | 1.0 | 1.7 |
| 5 | **Ill. 1332** | 49 | 15 | 82 | 63 | 100 | 28 | 1.5 | .8 |
| 6 | **Ill. 1859** | 49 | 15 | 79 | 56 | 100 | 31 | 2.2 | 0 |
| 7 | Ill. 1570 | 49 | 14 | 79 | 46 | 100 | 27 | 1.5 | 1.8 |
| 8 | Ill. 1657 | 49 | 18 | 82 | 36 | 99 | 32 | 1.2 | 0 |
| 9 | Mo. 862 | 48 | 17 | 76 | 63 | 100 | 34 | 1.0 | 0 |
| 10 | **Ill. 1539A** | 47 | 16 | 79 | 67 | 100 | 29 | 1.5 | .9 |
| 11 | **Ill. 1856** | 47 | 16 | 82 | 59 | 98 | 31 | 1.8 | 2.5 |
| 12 | Mo. 8010W | 47 | 18 | 77 | 54 | 100 | 32 | 1.0 | .7 |
| 13 | **Ill. 1852** | 47 | 16 | 77 | 61 | 100 | 32 | 1.8 | 0 |
| 14 | Ill. 1909 | 47 | 15 | 81 | 50 | 100 | 29 | 2.0 | 2.6 |
| 15 | **Ill. 2246W** | 47 | 15 | 79 | 65 | 99 | 29 | 3.0 | 4.2 |
| 16 | **Ill. 1349** | 47 | 16 | 78 | 81 | 99 | 34 | 1.0 | 1.0 |
| 17 | **Ill. 1893** | 47 | 15 | 75 | 72 | 100 | 31 | 1.5 | .9 |
| 18 | **Mo. 804** | 46 | 16 | 77 | 58 | 100 | 35 | 1.0 | 1.7 |
| 19 | **Ill. 1771** | 46 | 16 | 80 | 76 | 92 | 30 | 1.5 | 0 |
| 20 | **AES 805** | 46 | 15 | 79 | 73 | 98 | 27 | 2.0 | 0 |

[a] Grade 1 is most resistant; grade 4 is most susceptible to high temperature.

(Table is concluded on next page)

## Table 10. — Concluded

| Rank in yield | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height | Leaf firing[a] | Dropped ears |
|---|---|---|---|---|---|---|---|---|---|
| | **E — 1954 results (concluded)** | | | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* | *grade.* | *perct.* |
| 21 | Ill. 1918 | 46 | 15 | 80 | 52 | 100 | 29 | 2.8 | 1.6 |
| 22 | **Ill. 1914** | 46 | 16 | 80 | 66 | 100 | 28 | 2.8 | .8 |
| 23 | U.S. 13 | 46 | 15 | 79 | 47 | 100 | 30 | 2.0 | 1.6 |
| 24 | Tenn. 3744 | 45 | 16 | 74 | 28 | 100 | 26 | 1.5 | 2.5 |
| 25 | **Ill. 1896** | 45 | 16 | 81 | 59 | 98 | 27 | 3.2 | 1.9 |
| 26 | Ill. 1904 | 45 | 15 | 77 | 47 | 100 | 27 | 2.2 | 0 |
| 27 | Ill. 1897 | 45 | 15 | 77 | 50 | 100 | 27 | 3.0 | .8 |
| 28 | Ill. 2235W | 45 | 19 | 76 | 75 | 100 | 31 | 2.5 | 3.6 |
| 29 | Ill. 200 | 45 | 16 | 78 | 44 | 100 | 31 | 2.0 | 0 |
| 30 | Ill. 1919 | 44 | 14 | 77 | 63 | 100 | 27 | 2.8 | .8 |
| 31 | Ill. 1849 | 44 | 17 | 80 | 82 | 99 | 31 | 2.0 | 5.6 |
| 32 | Ill. 1850 | 44 | 16 | 79 | 74 | 100 | 31 | 2.0 | .9 |
| 33 | Ill. 6076 | 44 | 14 | 79 | 35 | 98 | 28 | 2.2 | 2.5 |
| 34 | Ill. 1916 | 44 | 14 | 80 | 57 | 99 | 28 | 2.5 | 1.8 |
| 35 | Ill. 1911 | 44 | 17 | 78 | 57 | 100 | 31 | 1.8 | 0 |
| 36 | Ill. 1912 | 43 | 14 | 80 | 58 | 99 | 25 | 3.8 | .9 |
| 37 | Ill. 1511 | 43 | 14 | 81 | 51 | 100 | 29 | 2.2 | 2.6 |
| 38 | Ill. 1910 | 43 | 16 | 83 | 50 | 99 | 26 | 4.0 | 0 |
| 39 | Ill. 1905 | 43 | 14 | 76 | 54 | 100 | 28 | 2.5 | 1.6 |
| 40 | Ill. 1906 | 42 | 15 | 78 | 44 | 100 | 26 | 2.2 | 3.2 |
| 41 | AES 903W | 42 | 16 | 74 | 66 | 100 | 27 | 2.2 | 2.5 |
| 42 | Ill. 1913 | 42 | 14 | 81 | 42 | 100 | 25 | 4.0 | 2.5 |
| 43 | Ill. 1908 | 40 | 15 | 79 | 53 | 100 | 27 | 4.0 | 1.7 |
| 44 | Ill. 1917 | 39 | 16 | 78 | 50 | 99 | 28 | 4.0 | 4.0 |
| 45 | Ill. 1915 | 39 | 15 | 78 | 56 | 100 | 27 | 3.8 | .8 |
| 46 | Ill. 6102 | 39 | 15 | 75 | 29 | 100 | 29 | 2.5 | 4.5 |
| 47 | Ill. 6075 | 39 | 15 | 78 | 29 | 100 | 26 | 3.5 | 1.7 |
| 48 | Ill. 6079 | 33 | 16 | 78 | 38 | 99 | 27 | 2.0 | .8 |
| 49 | Ill. 2214W | 30 | 14 | 73 | 36 | 100 | 28 | 3.0 | 1.7 |
| | Average | 45 | 16 | 79 | 55 | 99 | 29 | 2.3 | 1.6 |
| | Significant difference | 6 | .. | .. | 18 | 2 | 3 | 1.1 | ... |

[a] Grade 1 is most resistant; grade 4 is most susceptible to high temperature.

## Table 11. — THREE-WAY AND DOUBLE CROSSES OF ILLINOIS 448 MATURITY

### Tested in South-Central Illinois, 1954

(Entries in **boldface** were average or better in yield and standability and average or earlier in maturity)

| Code | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height | Leaf firing[a] | Dropped ears |
|---|---|---|---|---|---|---|---|---|---|
| | **A — Three-way crosses** | | | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* | *grade* | *perct.* |
| 1 | (K201×38-11)×B1A | 38 | 18 | 81 | 57 | 100 | 32 | 2.0 | 1.7 |
| 10 | **(K201×38-11)×B18** | 43 | 17 | 82 | 65 | 100 | 33 | 1.2 | 1.8 |
| 11 | (K201×38-11)×Kys | 39 | 19 | 77 | 42 | 100 | 37 | 1.0 | .8 |
| 14 | (K201×38-11)×K4 | 46 | 18 | 80 | 47 | 98 | 35 | 1.0 | 0 |
| 18 | (K201×38-11)×Ky36-11 | 48 | 19 | 81 | 72 | 100 | 35 | 2.2 | 1.7 |
| 56 | **(K201×38-11)×Ky106** | 47 | 16 | 80 | 65 | 100 | 35 | 1.0 | 0 |
| 20 | (K201×38-11)×Ky118 | 46 | 19 | 78 | 67 | 99 | 34 | 1.0 | .9 |
| 21 | (K201×38-11)×Ky120 | 42 | 19 | 79 | 78 | 100 | 33 | 1.2 | 2.6 |
| 19 | (K201×38-11)×Ky126 | 53 | 19 | 84 | 80 | 99 | 36 | 2.0 | .8 |
| 28 | (K201×38-11)×N5 | 36 | 18 | 82 | 39 | 100 | 34 | 1.0 | 0 |

[a] Grade 1 is most resistant; grade 4 is most susceptible to high temperature.

(Table is concluded on next page)

## Table 11. — Concluded

| Code | Entry | Acre yield | Moisture in grain | Shelling | Erect plants | Stand | Ear height | Leaf firing[a] | Dropped ears |
|---|---|---|---|---|---|---|---|---|---|
| | **A — Three-way crosses (concluded)** | | | | | | | | |
| | | *bu.* | *perct.* | *perct.* | *perct.* | *perct.* | *in.* | *grade* | *perct.* |
| 29 | (K201×38-11)×N9 | 48 | 16 | 80 | 62 | 100 | 33 | 1.5 | 0 |
| 30 | (K201×38-11)×N10 | 37 | 16 | 82 | 83 | 100 | 28 | 2.0 | 0 |
| 31 | (K201×38-11)×N15 | 47 | 22 | 83 | 49 | 99 | 29 | 1.2 | 1.7 |
| 55 | **(K201×38-11)×Oh7B** | 42 | 17 | 84 | 89 | 100 | 33 | 2.0 | 0 |
| 12 | (K201×38-11)×Oh401 | 37 | 14 | 80 | 65 | 99 | 30 | 2.5 | .9 |
| 13 | (K201×38-11)×Oh443 | 38 | 16 | 80 | 57 | 100 | 36 | 1.8 | 0 |
| 5 | **(K201×38-11)×Ok11** | 48 | 18 | 82 | 76 | 100 | 30 | 1.5 | 1.7 |
| 9 | (K201×38-11)×Ok12 | 36 | 17 | 78 | 40 | 100 | 34 | 2.8 | .8 |
| 6 | (K201×38-11)×Ok15 | 46 | 18 | 80 | 34 | 99 | 34 | 2.5 | 10.8 |
| 7 | (K201×38-11)×Ok19 | 40 | 18 | 79 | 80 | 99 | 33 | 2.2 | .9 |
| 8 | (K201×38-11)×Ok22 | 39 | 17 | 79 | 70 | 99 | 32 | 2.2 | .9 |
| 2 | (K201×38-11)×CI.7 | 44 | 20 | 83 | 72 | 100 | 36 | 1.0 | 1.9 |
| 3 | (K201×38-11)×CI.7A | 38 | 18 | 79 | 56 | 99 | 32 | 1.5 | 0 |
| 15 | **(K201×38-11)×CI.21E** | 49 | 17 | 80 | 81 | 100 | 33 | 1.0 | 0 |
| 4 | (K201×38-11)×CI.31 | 46 | 17 | 84 | 39 | 100 | 34 | 1.2 | 0 |
| 34 | (K201×38-11)×Kans. 52:1326 | 49 | 16 | 82 | 64 | 100 | 32 | 2.8 | 2.5 |
| 35 | (K201×38-11)×Kans. 52:1349 | 44 | 17 | 84 | 58 | 100 | 29 | 1.8 | 0 |
| 36 | (K201×38-11)×Kans. 52:1351 | 41 | 17 | 82 | 62 | 100 | 30 | 2.0 | .9 |
| 37 | (K201×38-11)×Kans. 52:1357 | 49 | 17 | 85 | 42 | 100 | 28 | 3.5 | 2.5 |
| 38 | (K201×38-11)×Kans. 52:1363 | 46 | 19 | 81 | 72 | 99 | 26 | 3.8 | 1.7 |
| 39 | **(K201×38-11)×Kans. 52:1367** | 43 | 16 | 82 | 68 | 100 | 32 | 2.2 | 0 |
| 40 | (K201×38-11)×Kans. 52:1385 | 37 | 18 | 75 | 72 | 100 | 33 | 1.0 | 0 |
| 41 | (K201×38-11)×Kans. 52:1391 | 41 | 16 | 80 | 60 | 99 | 32 | 2.2 | 0 |
| 42 | **(K201×38-11)×Kans. 52:1394** | 43 | 16 | 78 | 66 | 99 | 32 | 2.8 | 1.7 |
| 43 | (K201×38-11)×Kans. 52:1409 | 44 | 20 | 82 | 60 | 100 | 35 | 1.0 | 0 |
| 44 | **(K201×38-11)×Kans. 52:1411** | 43 | 18 | 79 | 82 | 100 | 31 | 1.5 | .8 |
| 45 | (K201×38-11)×Kans. 52:1412 | 49 | 18 | 82 | 36 | 100 | 36 | 1.8 | 0 |
| 46 | (K201×38-11)×Kans. 52:1421 | 45 | 23 | 80 | 25 | 98 | 36 | 1.0 | .9 |
| 47 | (K201×38-11)×Kans. 52:1430 | 44 | 17 | 82 | 62 | 100 | 32 | 3.5 | .9 |
| 48 | **(K201×38-11)×Kans. 52:1493** | 45 | 16 | 80 | 85 | 99 | 31 | 1.5 | 2.8 |
| 49 | **(K201×38-11)×Kans. 50:1109** | 45 | 18 | 82 | 96 | 97 | 32 | 2.5 | .8 |
| 22 | **(K201×38-11)×Ky52:130** | 44 | 15 | 83 | 97 | 100 | 30 | 4.0 | 5.0 |
| 23 | (K201×38-11)×Ky52:132 | 36 | 17 | 82 | 62 | 98 | 36 | 1.0 | 0 |
| 24 | (K201×38-11)×Ky52:134 | 32 | 18 | 74 | 84 | 99 | 34 | 2.2 | 0 |
| 25 | (K201×38-11)×Ky52:136 | 41 | 18 | 80 | 74 | 99 | 31 | 1.5 | .9 |
| 26 | (K201×38-11)×Ky52:138 | 40 | 18 | 84 | 54 | 100 | 30 | 3.0 | 1.7 |
| 27 | (K201×38-11)×Ky52:140 | 40 | 19 | 80 | 93 | 98 | 26 | 2.0 | 1.8 |
| 17 | (K201×38-11)×N47556 | 31 | 18 | 76 | 92 | 99 | 35 | 2.5 | 2.5 |
| 32 | (K201×38-11)×N47587-9 | 30 | 16 | 77 | 70 | 98 | 34 | 3.5 | 2.9 |
| 16 | (K201×38-11)×N47904 | 36 | 18 | 81 | 63 | 98 | 31 | 2.0 | 3.3 |
| 33 | (K201×38-11)×N82481 | 40 | 18 | 79 | 98 | 100 | 34 | 1.0 | 3.6 |
| 54 | (K201R×38-11)×Kys | 31 | 17 | 80 | 22 | 99 | 32 | 1.0 | 0 |
| 50 | (K201R×38-11)×K4 | 44 | 19 | 82 | 46 | 98 | 37 | 1.0 | 0 |
| 53 | (K201R×38-11)×Ky36-11 | 36 | 21 | 79 | 55 | 99 | 36 | 1.0 | 4.3 |
| 52 | (K201R×38-11)×CI.7 | 40 | 18 | 81 | 78 | 100 | 35 | 1.0 | 2.7 |
| 51 | (K201R×38-11)×CI.21E | 49 | 18 | 82 | 58 | 100 | 32 | 1.0 | 0 |
| | Average | 42 | 18 | 81 | 65 | 99 | 33 | 1.8 | 1.3 |
| | **B — Double crosses** | | | | | | | | |
| | Ill. 1852 | 50 | 18 | 82 | 75 | 100 | 34 | 1.5 | .9 |
| | AES 805 | 48 | 15 | 80 | 57 | 100 | 31 | 1.5 | 1.7 |
| | K1830 | 45 | 16 | 80 | 52 | 100 | 34 | 1.2 | 1.7 |
| | Ill. 1850 | 41 | 18 | 80 | 85 | 99 | 33 | 2.2 | .8 |
| | Average | 46 | 17 | 80 | 67 | 100 | 33 | 1.6 | 1.3 |
| | Significant difference | 9 | .. | .. | 20 | 2 | 3 | .9 | ... |

[a] Grade 1 is most resistant; grade 4 is most susceptible to high temperature.

## Table 12. — DOUBLE-CROSS HYBRID NUMBERS, PEDIGREES, AND INDEX TO TABLES

| Hybrid | Pedigree | Performance given in Table No. |
|---|---|---|
| **Illinois hybrids** | | |
| 21 | (Hy2 × 187-2) (WF9 × 38-11) | 2ABCDE, 6ACDE |
| 101 | (M14 × WF9) (187-2 × W26) | 2ABCDE |
| 200 | (WF9 × 38-11) (L317 × K4) | 10ABCDE |
| 274-1 | (Hy2 × WF9) (Oh7 × 187-2) | 4BCDE, 6ABCDE |
| 972A-1 | (Hy2 × L317) (WF9 × Oh7) | 4BCDE, 6ABCDE |
| 1091A | (Hy2 × 187-2) (M14 × WF9) | 2ABCDE |
| 1277 | (M14 × WF9) (I.205 × 187-2) | 2ABCDE, 4ABCDE |
| 1279 | (M14 × WF9) (A375 × 187-2) | 2ABCDE |
| 1280 | (M14 × WF9) (Os420 × 187-2) | 2ABCDE, 4ABCDE |
| 1281 | (M14 × WF9) (A374 × A375) | 2BCDE |
| 1289 | (M14 × W22) (WF9 × I.205) | 2ABCDE, 3B |
| 1290 | (M14 × 187-2) (WF9 × I.205) | 2ABCDE, 4ABCDE |
| 1332 | (Hy2 × Oh7) (WF9 × 38-11) | 4BCDE, 6ABCDE, 10ABCDE |
| 1349 | (38-11 × Mo940) (K155 × K201) | 10ABCDE |
| 1375 | (M14 × WF9) (N6 × Oh51A) | 2ABCDE |
| 1421 | (Hy2 × WF9) (P8 × Oh7) | 6BCDE |
| 1493 | (WF9 × I.205) (Oh28 × W22) | 2BCDE |
| 1511 | (Hy2 × WF9) (38-11 × L304A) | 4BCDE, 6ABCDE, 10CDE |
| 1539A | (38-11 × CI.7) (K201 × CI.21E) | 10ABCDE |
| 1555A | (WF9 × Oh51A) (I.224 × Oh28) | 2ABCDE, 4ABCDE |
| 1557 | (M14 × Oh28) (I.205 × Oh51A) | 2ABCDE |
| 1558 | (M14 × WF9) (I.205 × Oh28) | 2ABCDE |
| 1559B | (M14 × Oh28) (WF9 × Oh51A) | 2ABCDE |
| 1560A | (WF9 × Oh51A) (I.205 × Oh28) | 2ABCDE, 4ABCDE |
| 1570 | (Hy2 × Oh41) (WF9 × 38-11) | 4BCDE, 6ABCDE, 10ABCDE |
| 1575 | (M14 × WF9) (L12 × Oh28) | 2ABCDE, 4ABCDE |
| 1579 | (M14 × Oh43) (A73 × Oh5) | 2BCDE |
| 1585 | (M14 × L289) (Oh5 × Oh43) | 2BCDE |
| 1595 | (WF9 × I.205) (187-2 × W22) | 2ABCDE |
| 1617 | (WF9 × B10) (Oh7 × Oh41) | 4BCDE |
| 1656 | (C103 × Hy2) (WF9 × 38-11) | 10BCDE |
| 1657 | (K4 × Oh7) (K201 × CI.21E) | 10ABCDE |
| 1759 | (WF9 × 38-11) (Oh4C × Oh45) | 6BCDE |
| 1760 | (WF9 × 38-11) (Oh29 × Oh45) | 4BCDE |
| 1764 | (Hy2 × WF9) (38-11 × J47) | 6BCDE |
| 1767 | (Hy2 × Oh45) (WF9 × 38-11) | 6BCDE |
| 1771 | (Oh7B × CI.7) (T8 × CI.21E) | 10BCDE |
| 1777 | (Hy2 × WF9) (R114 × R116) | 6BCDE |
| 1788 | (WF9 × 38-11) (Oh41 × CI.21E) | 6BCDE, 10BCDE |
| 1799 | (M14 × WF9) (B8 × Oh51A) | 2CDE |
| 1800 | (M14 × WF9) (A73 × A295) | 2CDE, 3B |

(Table is continued on next page)

**Table 12 — Continued**

| Hybrid | Pedigree | Performance given in Table No. |
|---|---|---|
| **Illinois hybrids (continued)** | | |
| 1802 | (M14 × WF9) (A295 × Oh51A) | 2CDE |
| 1813 | (C103 × Oh45) (Hy2 × WF9) | 4CDE, 6DE |
| 1814 | (Hy2 × WF9) (M14 × Oh45) | 4CDE |
| 1819 | (R2 × WF9) (R61 × Oh43) | 4CDE |
| 1826 | (WF9 × B35) (K237 × Oh45) | 4CDE |
| 1831 | (WF9 × W146) (K237 × Oh45) | 4CDE |
| 1849 | (C103 × 38-11) (K201 × CI.21E) | 10CDE |
| 1850 | (C103 × CI.21E) (38-11 × K201) | 10CDE, 11B |
| 1851 | (C103 × 38-11) (Oh7 × CI.21E) | 10CDE |
| 1852 | (C103 × CI.21E) (38-11 × Oh7) | 10CDE, 11B |
| 1856 | (38-11 × Oh7) (K201 × CI.21E) | 10CDE |
| 1857 | (38-11 × Oh41) (K201 × CI.21E) | 10CDE |
| 1859 | (38-11 × Oh7) (Oh41 × CI.21E) | 10CDE |
| 1861 | (M14 × WF9) (I.224 × Oh28) | 2DE |
| 1862 | (M14 × WF9) (Oh43 × Oh51A) | 2DE |
| 1863 | (M14 × WF9) (I.205 × Oh43) | 2DE, 3B, 4DE |
| 1864 | (M14 × WF9) (Oh43 × W22) | 2DE, 4DE |
| 1865 | (M14 × WF9) (Oh5 × Oh43) | 2DE |
| 1866 | (M14 × WF9) (Oh26A × Oh45) | 2DE |
| 1868 | (C103 × Oh43) (Hy2 × WF9) | 4DE |
| 1873 | (C103 × M14) (R75 × Oh43) | 4DE |
| 1875 | (C103 × 38-11) (Hy2 × WF9) | 4DE |
| 1876 | (R97 × R98) (WF9 × 38-11) | 6DE |
| 1877 | (R99 × R100) (WF9 × 38-11) | 6DE |
| 1880 | (R103 × R104) (WF9 × 38-11) | 6DE |
| 1884 | (C103 × R100) (WF9 × 38-11) | 6DE |
| 1889 | (C103 × Oh45) (38-11 × Oh29) | 6DE |
| 1890 | (C103 × Oh45) (R75 × 38-11) | 6DE |
| 1893 | (C103 × 38-11) (Oh7B × Oh29) | 10DE |
| 1896 | (R138 × R139) (R140 × R141) | 6DE, 10DE |
| 1896A | (R139 × R141) (R138 × R140) | 4DE |
| 1897 | (R138 × R141) (R139 × R143) | 10DE |
| 1902 | (R138 × R142) (R139 × R141) | 2DE |
| 1903 | (M14 × WF9) (R119 × R120) | 2E, 4E |
| 1904 | (R81 × R85) (WF9 × 38-11) | 4E, 6E, 10E |
| 1905 | (R81 × R120) (WF9 × 38-11) | 4E, 6E, 10E |
| 1906 | (Hy2 × WF9) (R81 × R119) | 4E, 6E, 10E |
| 1908 | (R154 × R155) (WF9 × 38-11) | 4E, 6E, 10E |
| 1909 | (R130 × R151) (WF9 × 38-11) | 4E, 6E, 10E |
| 1910 | (R154 × R156) (WF9 × 38-11) | 4E, 6E, 10E |

(Table is continued on next page)

Table 12 — Continued

| Hybrid | Pedigree | Performance given in Table No. |
|---|---|---|
| **Illinois hybrids (continued)** | | |
| 1911 | (R130 × R153) (WF9 × 38-11) | 4E, 6E, 10E |
| 1912 | (R151 × R156) (WF9 × 38-11) | 4E, 6E, 10E |
| 1913 | (R151 × R154) (WF9 × 38-11) | 4E, 6E, 10E |
| 1914 | (R153 × R155) (WF9 × 38-11) | 4E, 6E, 10E |
| 1915 | (R151 × R155) (WF9 × 38-11) | 4E, 6E, 10E |
| 1916 | (R130 × R154) (WF9 × 38-11) | 4E, 6E, 10E |
| 1917 | (R153 × R154) (WF9 × 38-11) | 4E, 6E, 10E |
| 1918 | (R151 × R153) (WF9 × 38-11) | 4E, 6E, 10E |
| 1919 | (R130 × R156) (WF9 × 38-11) | 4E, 6E, 10E |
| 2214W | (R30 × Ky27) (H21 × K64) | 10ABCDE |
| 2235W | (H21 × K64) (33-16 × Mo2RF) | 10ABCDE |
| 2246W | (R144 × R145) (R148 × R149) | 10DE |
| 2247W | (R144 × R145) (R146 × R148) | 2E, 4DE |
| 6015 | (R84 × 38-11) (R118 × K4) | 2E |
| 6016 | (R78 × K4) (R84 × 38-11) | 7B |
| 6021 | (R75 × R76) (R84 × K4) | 4E, 6E, 7B |
| 6052 | (R78 × 38-11) (R84 × K4) | 2E |
| 6062 | (R76 × K4) (R78 × R84) | 2E |
| 6074 | (R75 × R87) (R78 × R83) | 2DE |
| 6075 | (R75 × R83) (R78 × R87) | 6DE, 10DE |
| 6076 | (R76 × R78) (R87 × R117) | 10DE |
| 6079 | (R78 × R84) (R87 × R119) | 10DE |
| 6102 | (R75 × R85) (R84 × R87) | 10DE |
| **Miscellaneous hybrids** | | |
| AES 510 | (WF9 × W22) (H19 × B9) | 2E |
| AES 610 | (M14 × A73) (Oh43 × Oh51A) | 2CDE |
| AES 702 (Ill. 1790) | (C103 × M14) (Hy2 × WF9) | 2BCDE, 3B, 4BCDE, 5C |
| AES 801 | (WF9 × B7) (B10 × B14) | 6CDE |
| AES 802 | (Hy × WF9) (38-11 × N6) | 6CDE |
| AES 803 | (WF9 × 187-2) (N6 × K148) | 6CDE |
| AES 805 (Ill. 1770) | (C103 × Oh45) (WF9 × 38-11) | 4BCDE, 6BCDE, 7B, 8C, 9C, 10CDE, 11B |
| AES 806 | (Hy × WF9) (N6 × N15) | 4CDE, 6E |
| AES 903W | (H28 × K55) (H30 × K41) | 10E |
| Ind. 0421 | (M14 × WF9) (B9 × W22) | 2CDE |
| Ind. 1405 | (H41 × H42) (H45 × H46) | 4CDE |
| Ind. 2401 | (M14 × WF9) (K237 × Oh45) | 4E |
| Ind. 2609 | (WF9 × 38-11) (H14 × Oh43) | 6E |
| Ind. 9502 | (H26 × H27) (H28 × H29) | 6E |
| Iowa 4297 | (M14 × 187-2) (WF9 × I.205) | 4BCDE, 5C |
| Iowa 4558 | (M14 × WF9) (B8 × B21) | 2E |

(Table is concluded on next page)

Table 12. — Concluded

| Hybrid | Pedigree | Performance given in Table No. |
|---|---|---|
| **Miscellaneous hybrids (concluded)** | | |
| Iowa 4615 | (Hy × WF9) (B14 × B36) | 6E |
| Iowa 4630 | (M14 × B21) (WF9 × Oh51A) | 2E |
| I.S.P. 2 | (C103 × Oh45) (M14 × WF9) | 2CDE |
| K1830 | (K201 × 38-11) (K4 × CI.7) | 11B |
| Minn. 4 | (A286 × A295) (A375 × Oh51A) | 2E |
| Minn. 40 | (A73 × A401) (A286 × Oh51A) | 2E |
| Mo. 804 | (CI.7 × K4) (38-11 × CI.21E) | 10ABCDE |
| Mo. 862 | (K201 × T202) (CI.21E × Mo567) | 10BCDE |
| Mo. 4041W | (WhHy × K55) (Wh38-11 × 33-16) | 6CDE |
| Mo. 8010W | (K64 × Mo22) (T111 × T115) | 10E |
| Ohio M15 | (Oh26 × Oh51) (A × W23) | 2CDE |
| Ohio K24 | (WF9 × Oh51A) (Oh33 × Oh40B) | 2BCDE, 3B |
| Ohio 3247 | (Oh43 × Oh45) (Oh51A × W22) | 4E |
| Ohio 4808 | (Oh4C × Oh51A) (Oh28 × Oh45) | 6CDE |
| Ohio 5305 | (A73 × Oh5) (Oh26A × Oh51A) | 2E |
| Tenn. 3473 | (M14 × 751) (T206 × 61.984-8) | 6E |
| Tenn. 3744 | (H21 × K6) (T111 × T115) | 10E |
| U.S. 13 | (Hy × L317) (WF9 × 38-11) | 6ABCDE, 7B, 8C, 9C, 10ABCDE |

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